ALCHEMY IN SELECTED PLAYS OF SHAKESPEARE

An abstract of a Dissertation by
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Alchemy, as a philosophical system incorporating elements of religion, psychology, and myth, provided a rich matrix of imagery and associations. The meanings of certain allusions and processes in Shakespeare's plays are clarified and extended by reference to alchemical concepts. Research includes examination of primary alchemical texts, a survey of historical and critical comment on alchemy, exploration of alchemical metaphors in selected plays of Shakespeare, and an intensive examination of Hamlet. Citations from alchemical texts are compared to specific passages in Shakespeare's works, not as sources, but as explanatory analoques.

Historical evidence indicates that alchemy was more eclectic, more pervasive, and more influential than previously judged. In both its exoteric and esoteric aspects, it held a significant place in the developing thought patterns of mankind. The material of esoteric alchemy was man himself. The alchemists assumed a world which operated as chemical process, a Nature which tended toward perfection but might be diverted, and a method through which man could participate in the restoration and rejuvenation of himself and his world.

Alchemical references are implied in the metaphorical use of blood as tincture in Julius Caesar and Macbeth. Cordelia is related to the Paracelsian idea of balm in King Lear. Alchemical imagery associated with the processes of tincturing, surfeiting, healing, and magic is found in other selected references.

Hamlet participates in a process of restoration which includes both his destruction and his fulfillment. His actions are linked to the passage of time and a movement through various stages which may be compared to the steps of the alchemical process: dissolution, separation, putrefaction, fixation, and projection. His world, like the world of the alchemists', is full of the potentialities of taint or tincture.

Alchemy is examined as an essentially dramatic and poetic complex of ideas suggesting the possibilities of transformation.

ALCHEMY IN SELECTED PLAYS OF SHAKESPEARE

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by

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TABLE OF CONTENTS

Chapter 1

AN ALCHEMIST'S VIEW OF THE WORLD

HISTORICAL BACKGROUND

The literary critic must, inevitably, approach the subject of alchemy with a great deal of hesitation. Like the initiate, he faces the trial ahead with both fear and hope. On the one hand, he is confronted with a vast collection of complex, inconsistent, deliberately veiled alchemical literature which is foreign both to modern consciousness and to his own literary background. This great warning is strengthened by the fact that, for hundreds of years, literary critics have done very well while paying very slight attention to this whole unmanageable body of thought and imagery. Yet there is a temptation to proceed. The scientists, the philosophers, the occultists, the mystics, and the psychologists cry out from their shiny new (or reprinted) paperbacks that alchemy was, for centuries, a significant influence on the minds and hearts of men. They insist, scientists and mystics alike, that one is simply mistaken if he dismisses this peculiar collection of ideas as nothing more than man's vain and foolish attempt to turn lead into gold. As Titus Burckhart satirically comments, "It never seemed to strike anyone as in the least improbable that an 'art' of the kind alleged should, despite all its folly and deceptions, have implanted itself for centuries on end in the most diverse cultures of East and West. On the contrary, people were

much more inclined to take the view that until a century or so ago all humanity had been dreaming a stupid dream, the awakening from which came only with our own times, as if the spiritual-intellectual faculty of man--his power to distinguish real from unreal--were itself subject to some sort of biological evolution."[1]

Several possible reactions might be appropriate to such a challenge. The most comfortable, of course, would be to simply ignore it, at least as far as literature is concerned, and to go on assuming that men of good sense would not have seriously bothered with alchemy, except to debunk its vain and foolish presumptions (witness Chaucer's "Canon's Yeoman's Tale" and Ben Jonson's The Alchemist.) Such an attitude is particularly easy to assume when one considers only the alchemy of the fourteenth, fifteenth, and sixteenth centuries, a period which Hopkins labels as pseudo-alchemy.[2] It was during this time that alchemy became both most corrupted and most popular and pervasive in its influence. The period was characterized both by the genuine enthusiasm of its adherents and the large number of charlatans devoted to alchemical trickery. The alchemy of the Medieval and Renaissance periods did not, however, spring mysteriously into being, but developed out of a very long history. Its true advocates, in that time period as

[1]Titus Burckhart, Alchemy: Science of the Cosmos, Science of the Soul, trans. William Stoddard (1967; rpt. Baltimore: Penguin Books, 1971), pp. 7-8.

[2]Arthur John Hopkins, Alchemy, Child of Greek Philosophy (New York: AMS Press, 1967), pp. 187-215. Hopkins points out that this period of alchemy has been the most widely known and for many has represented the only alchemy; thus, the misinterpretation of the true nature of alchemy and the over-emphasis on its "baser" aspects as represented by the trickery of the charlatans.

in others, were devoted to its possibilities and, if anything, even more hopeful of eventual success. As Hopkins explains, "Never had alchemy been so widely accepted, never had the preparations of the elixir seemed so much a matter of tomorrow--needing only a little more laboratory examination of materials, a few more workers to try out all formulas."[1] Although this period of alchemy (the "last gasp" before it largely disappeared at the end of the seventeenth century) should not be over-emphasized from the historical perspective since it does not fully represent the true nature of alchemy, it seems perhaps the most fruitful period to examine from a literary perspective, simply because of the more general circulation of alchemical ideas during this time.

Evidence seems to indicate also that, even though the perversions of pseudo-alchemy were well known, a great many thoughtful men still took the subject quite seriously throughout the Renaissance. Hiram Haydn, for instance, places the alchemists firmly in the group of thinkers whom he discusses as the Counter-Renaissance.[2] He makes it clear that the lines of demarkation between various philosophies were, at best, a little murky, and that the alchemists had much in common with innovators generally more respected and acclaimed from the modern viewpoint. Haydn draws some interesting parallels between the alchemists and the Calvinists and also between the practitioners of what we now consider "science" and those we would currently rate no higher than "magician." Haydn

[1] Hopkins, p. 205.

[2] Hiram Haydn, The Counter-Renaissance (Gloucester, Mass.: Peter Smith, 1966), pp. 176-212, 514-17.

comments, "At first glance, the methods and goals of the magicians and the empiricists seem extremely different. Yet curiously enough, many of those practicing primarily in the tradition of one of those two groups also dabble in the other--or occupy an ambiguous position, partaking of each attitude, midway between the two. Paracelsus, Jerome Cardan and John Dee illustrate this ambiguity beautifully. Each seems half bombastic charlatan, half genuine scientist."[1]

Still, Paracelsus, Cardan, and Dee have enough of the charlatan in them that it would not be difficult to dismiss them, and, along with them, any serious consideration of alchemy as a significant and general influence on the thought of their world. Allen Debus, however, in The Chemical Dream of the Renaissance adds to one's uneasiness by pointing out that Kepler engaged in a verbal debate with the alchemist Robert Fludd which lasted for years, that Father Marin Mersenne discussed in writing whether alchemy should be considered an exact science, and that Pierre Gassendi prepared a long and careful refutation of Fludd's work.[2] What is significant is that these men, now considered sound early scientists, seriously considered alchemy and the Paracelsian view of nature to the extent that they felt compelled to "defend" themselves against its growing popularity. Perhaps they did, in fact,

[1]Haydn, p. 177.

[2]Allen Debus, The Chemical Dream of the Renaissance, Churchill College Overseas Fellowship Lecture, no. 3 (Cambridge: W. Heffer and Sons, 1968), p. 16. Allen Debus gives further evidence of the seriousness with which alchemy was treated by scientists of the period in Alchemy and Chemistry in the Seventeenth Century (Los Angeles: William Andrews Clark Memorial Library, 1966).

have ample reason for alarm. Lynn Thorndike, A History of Magic and Experimental Science, discusses the "vast output of alchemical literature"[1] in the late sixteenth and early seventeenth centuries. She points out that "Piere Boel in his mid-century bibliography [Bibliotheca Chimeca sen catalogue librortum philosophicorum hermeticous] professed to list 4,000 chemical authors (or titles?), past and present, but still omitted many according to Barrichius [De orter et progressa chemial]."[2] She further declares, "that the writings of past adepts and authorities in alchemy still commanded a wide circle of readers as well as scribblers, is seen from the currency of Zitner's Theatrum Chemicum, an omnium gatherum of such literature.[3] This collection, eventually containing six volumes, was reprinted or expanded three times between 1602 and 1659.

Recent studies have also shown that alchemical ideas persisted in or at least influenced some of the major figures of the seventeenth century. Betty Jo Teeter Dobbs, The Foundations of Newton's Alchemy, points out that among Isaac Newton's papers were some 650,000 words, written in Newton's own hand, on alchemy. These particular papers, because they were considered "damaging" to the great scientist's image, were largely ignored by early biographers, again suggesting the tendency to dismiss alchemy as an uncharacteristic or unfruitful area of endeavor. Dobbs goes on to explore the

[1] Lynn Thorndike, A History of Magic and Experimental Science, VII (New York: Columbia University Press, 1958), p. 154.

[2] Ibid., pp. 153-54.

[3] Ibid., p. 154.

intellectual atmosphere and the prevailing assumptions which encouraged Newton to seriously engage in many alchemical experiments.[1]

Alchemy, specifically the Paracelsian brand of alchemy-medicine, was prominent in the sixteenth and early years of the seventeenth century, not only in esoteric collections, but also in the "news" of the day. In 1600, the London College of Physicians examined a certain Frances Anthony who was suspected of prescribing and selling aurum portable (elixir). He was forbidden to continue his practice, a prohibition which he repeatedly ignored in spite of fines and imprisonment. Three years later, in 1603, the controversy erupted between the Paracelsists and the medical faculty of Paris. Paul Kocher, historian, suggests that the theories of Paracelsus stirred up such a storm of controversy that, between 1590 and 1600, every educated person in England must have been aware of his works.[2]

The alchemists themselves, even into the middle of the seventeenth century, were full of optimism that their theories would eventually, even if not quite yet, replace scholasticism and Galenic medicine. Oswald Croll, in his book Discovering the Great and Deep Mysteries of Nature in Philosophy Reformed and Improved (1657), pointed out that many of the courts of Europe used Paracelsian physicians: "he attributed their success to the truth of their chemical hypotheses, to the inherent progress of medical

[1]Betty Jo Teeter Dobbs, The Foundations of Newton's Alchemy (Cambridge: Cambridge University Press, 1975), pp. 10-11, 25-92.

[2]Paul Kocher, Bulletin of the History of Medicine (1947), 475, cited by W. A. Murray, "Why Was Duncan's Blood Golden?" Shakespeare Survey, 19 (1966), 37.

knowledge, and the elegant simplicity of the macrocosm-microcosm analogy."[1] One such court was the court of King James I of England, where Theodore Turquet de Mayerne, Paracelsian doctor, served the king.[2] James himself showed some detailed knowledge of Paracelsian theory in his Counterblaste to Tobacco. Elizabeth, before him, had welcomed to her court Dr. John Dee, an alchemist and astrologer who later became quite notorious in association with Edward Kelly.

Thus, familiarity with alchemical ideas was not limited to a few quacks and neither were such ideas always regarded as completely fantastic and untenable. Alchemy had a considerable influence for many years on the thinking of many men. This statement is essentially true and may be amply verified from whatever angle one approaches the subject. That is to say, the scientific historian recognizes a certain contribution from the alchemists to science (Read, Thorndike, Redford), the philosopher finds a valid place in the development of ideas for the alchemist (Burckhardt, Hopkins), the mythologist draws relationships between alchemy and universal concerns repeatedly expressed in myth (Eliade, Lindsay), the psychologist studies the processes of alchemy as evidence of early depth psychology (Jung, Silberer) and the mystic finds another manifestation of the mystical search for union in alchemy

[1]Debus, Chemical Dream of the Renaissance, p. 17.

[2]Kocher, p. 475

(Underhill, A. E. Waite).[1] None of these indicate that they believe man ever turned lead into gold, but they all accord to alchemy an influential place in the developing thought patterns of mankind. Only in literary study has alchemy been largely ignored. Yet who would not suspect that a writer, a man such as Shakespeare perhaps, living in the midst of the Paracelsian controversy, having easy access to the rich metaphors and imagery of alchemy, knowing the court's fondness for such extravagance, and realizing the public appeal of this strange magic, would not transform into poetry some of the materials of alchemy?

That Shakespeare was exposed to alchemical ideas seems almost beyond doubt. Even writers of the period who were not themselves alchemists and who did not believe in it often commented about it.

[1]The list of authors represents some standard works on alchemy and demonstrates the great diversity in approach to this subject. Although many of these works will be cited in the text, the wealth of information they present is barely touched upon in the limited scope of this paper. Therefore, the reader who is interested in a more comprehensive understanding of alchemy from various viewpoints is referred to the following works: John Read, Prelude To Chemistry (New York: Macmillan Company, 1937); and Through Alchemy To Chemistry (London: G. Bell and Sons, 1957); Lynn Thorndike, A History of Magic and Experimental Science, loc. cit.; H. Stanley Redgrave, Alchemy: Ancient and Modern (1911; rpt. New York: Harper and Row, 1973); Titus Burckhardt, Alchemy: Science of the Cosmos, Science of the Soul, loc. cit.; John Hopkins, Alchemy, Child of Greek Philosophy, loc. cit.; Mircea Eliade, The Forge and the Crucible, trans. Stephen Carrin (New York: Harper and Brothers, 1962); Jack Lindsay, The Origins of Alchemy in Graeco-Roman Egypt (New York: Barnes and Noble, 1970); Carl Jung, Psychology and Alchemy, trans. R. F. C. Hull, 2nd ed., 12 (1953; rpt. Princeton, N.J.: Princeton University Press, 1968) and Alchemical Studies, trans. R. F. C. Hull, 13 (Princeton, N.J.: Princeton University Press, 1967); Herbert Silberer, Hidden Symbolism of Alchemy and the Occult Arts, trans. Smith Ely Dellife (1917; rpt. New York: Dover Publications, 1971); Evelyn Underhill, Mysticism: A Study in the Nature and Development of Man's Spiritual Consciousness, 4th ed. (New York: E. P. Dutton, 1912); Arthur Edward Waite, The Secret Tradition in Alchemy (New York: Alfred A. Knopf, 1926).

Francis Bacon, for instance, while careful to disassociate himself from Roger's ideas, frequently mentioned alchemy and used its metaphors to illustrate his own thoughts. Grahm Rees in "Francis Bacon's Semi-Paracelsian Cosmology" contends that Bacon was considerably influenced in his philosophy by the complex of ideas associated with Paracelsus.[1] Alchemical works, such as George Ripley's Compound of Alchemy published in 1591 were "popular" and readily available, as evidenced by numerous reprints and revisions. Even if one ignored the written word, visual evidence of alchemy was abundant. Such famous artists as Dürer, Weiditz, Stradanus, Teniers, Breughel and Wijck chose alchemical subjects or used the symbolism of alchemy in their paintings.[2] Alchemy showed up in the emblem books and in the growing number of "picture" books concerned with mythology; the alchemists, of course, interpreted myth as "an allegorical exposition of the alchemical process."[3] The tendency to use mythological figures as pictorial representations of alchemy culminated in Michael Maier's Arcana Arcanissima (The Most Secret of Secrets), Visatorium and Atalanta Fugiens, illustrated beauti-

[1]Grahm Rees, "Francis Bacon's Semi-Paracelsian Cosmology," Ambix 22 (1975), 81-101 explains some of the alchemical influences present in Francis Bacon's thought.

[2]John Read, The Alchemist in Life, Literature and Art (London: Thomas Nelson and Sons, 1947), pp. 56-88. Read presents a thorough examination of alchemical subjects and symbolism in the art of this period. He furnishes numerous reproductions of the major works and gives a detailed analysis of their significance in terms of alchemy.

[3]H. J. Sheppard, "The Mythological Tradition and Seventeenth Century Alchemy," Science, Medicine and Society in the Renaissance, ed. Allen G. Debus (New York: Science History Publications, 1972), p. 53.

fully by the emblematic pictures of J. T. de Bry.[1] Visual exposition of alchemy was also found in the Ripley Scrowles (1588) and Splendor Solis (1582), both works unequivocally portraying the various stages of the alchemical process.[2]

In addition to the written and visual abundance of alchemical material, it should also be remembered that those associated with alchemy were very noticeable in the current "happenings" of the time. The controversy associated with Paracelsus and his followers has been mentioned. In the case-books of Shakespeare's son-in-law, Dr. John Hall, Laudanum Paracelsi is prescribed, and previous research has indicated that Shakespeare was not only very interested in, but also had some precise knowledge of medicine.[3] Dr. John Dee, in his association with Elizabeth's court, his escapades with

[1]A very detailed analysis of the emblems in Atalanta Fugiens is presented by H. M. E. DeJong, Michael Maier's Atalanta Fugiens (Leiden: E. J. Brill, 1969). DeJong examines each emblem as to its meaning, its alchemical source, and its connection to the other emblems.

[2]Color reproductions of pages from the Ripley Scrowles and the Splendor Solis can be found in C. A. Burland's The Arts of the Alchemists (New York: Macmillan Company, 1968). The Splendor Solis was supposedly written by Solomon Trismosin, an adept and teacher of Paracelsus. An interesting edition of this work including "Introduction, Elucidation of the Paintings, aiding the Interpretation of their Occult meaning, Trismosin's Autobiographical Account of his Travels in Search of the Philosopher's Stone, A Summary of his Alchemical Process called 'The Red Lion', and Explanatory Notes" is presented by an anonymous J. K. in a book published by Kegan Paul, French, Trubner and Co., London, 1920. Herbert Berry, "Dr. Fludd's Engravings and Their Beholders," Shakespeare Studies, 3 (1967), 11-21 gives evidence of another kind of "visual"exposition of alchemical ideas.

[3]John Charles Bucknill, M.D., The Medical Knowledge of Shakespeare (1860; rpt. New York: AMS Press, 1971), p. 44. Further confirmation of Shakespeare's exposure to the Galenic-Paracelsian controversy is provided by Irving I. Edgar, Shakespeare, Medicine and Psychiatry (London: Vision Press, 1970). Irving concludes,

Edward Kelley, and his sojourn to the court of Rudolph II, gained a good deal of notoriety in court circles. Ben Jonson mentions his name specifically in The Alchemist and Woodman suggests that Dee may have been the model for Shakespeare's Prospero.[1] Simon Foreman, another astrologer and alchemist, was at least peripherally associated with Shakespeare; A. L. Rowse relied on Foreman's diary to reveal the identity of Shakespeare's "dark lady."[2] Thus, although it cannot be shown conclusively that Shakespeare read any alchemical text, viewed any alchemical emblem or picture, or knew any advocates of alchemy, one would almost have to believe him blind and deaf to have escaped any exposure to the subject. It filled the air about him, and Shakespeare was not one to ignore potential tools for his trade.

In the theater, also, one could hear the echoing phrases of the alchemists. Ben Jonson used the imagery of alchemy extensively in Volpone, the court masque, "Mercury Vindicated at Court" and, of course, in The Alchemist. One senses in The Alchemist that Jonson not only has a very thorough grasp of the technical terminology associated with alchemy, but also uses the process itself. From the beginning of the play to the end, the odd mixture of characters bubbles and distills and transmutes until it is heated to

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"how could he have escaped such knowledge." He further points to specific usages in other Renaissance plays by Jonson, Middleton, and Marlowe (pp. 155-57). Richard K. Stensgaard examines Shakespeare's use of the controversy in "All's Well That Ends Well and the Galnico-Paracelsian Controversy," Renaissance Quarterly 25, No. 2 (1972), 173-87.

[1] David Woodman, White Magic and English Renaissance Drama (Rutherford: Fairleigh Dickinson University Press, 1973), p. 33.

[2] A. L. Rowse, Sex and Society in Shakespeare's Age: Simon Forman the Astrologer (New York: Scribner, 1974).

eruption. When Face cries, "All the works/Are flown in fumo" (IV, V, 58-59) it is exactly what one expects--not just of the false alchemy but of the whole world of the play itself. Robert Greene takes an alchemical theme in his Friar Bacon and Friar Bungay.[1] John Marston uses the symbolism of alchemy (rather superficially, but with easy familiarity) in Eastward Ho and Jack Drum's Entertainment. Alchemical elements can be found in Thomas Heywood's four plays dealing with ancient mythology, The Golden Age, The Silver Age, The Bronze Age, and The Iron Age. John Lyly shows some knowledge of alchemical metaphors in Gallathea. The playwrights differ greatly in the extent to which they use alchemy and in their treatment of it, but all are obviously familiar with it. Along with the many poets of the sixteenth and seventeenth centuries who make obvious reference to alchemy--John Donne, George Herbert, Herbert of Cherbury, and Webster--they lead one to suspect that the language of alchemy was in itself a kind of gold mine for the writers of the period.[2]

One may also begin with some assumptions about Shakespeare, based on previous study. Caroline Spurgeon, and many others since, have shown that Shakespeare was not highly "literary" in his

[1]Lynn Veach Sadler provides an analysis of the alchemy in this play in her article, "Alchemy and Greene's Friar Bacon and Friar Bungay," Ambix, 12 (1975), 111-24.

[2]Joseph A. Mazzeo, "Notes on John Donne's Alchemical Imagery," Isis, 48 (1957), 103-23 provides a good review of Donne's alchemical imagery. Besides Mazzeo's article, one may refer to Edgar H. Duncan, "Donne's Alchemical Figures," Journal of English Literary History, 19 (1942), 257-85. Patrick Grant, The Transformation of Sin: Studies in Donne, Herbert, Vaughn, and Traherne (Amherst; University of Massachusetts Press, 1974) also provides some suggestion of the influence of hermetic and alchemical ideas on the metaphysical poets.

choice of imagery.[1] A great proportion of his images come from nature and the world around him, rather than from books. He concentrates on imagery that creates an immediate and dramatic effect. The same tendency is evident in his use of mythology. The allusions he makes are not extended, or, in some cases, even very precise. They draw upon general knowledge and qualities and actions which are immediately accessible and essentially dramatic (a very high percentage of his mythological allusions can be traced to a single source--Ovid's Metamorphases).[2] In a similar vein, literary historians have shown that Shakespeare did make use of philosophical controversies in his plays. He did not do so, however, with any kind of judgmental attitude. Shakespeare was not an advocate for a particular philosophy; his plays never became mere vehicles for an expression of his own opinions. A particular philosophical viewpoint might be treated quite differently in one play than in another. All this is to say, quite simply, that Shakespeare was, above all, a supreme dramatist. One has to assume, therefore, that if he used alchemical imagery (or indeed imagery associated with any other particular world view) he would do so in a fairly general, non-technical way. The imagery would have to call up some immediate associations for his audience. It would have to be potentially dramatic and poetic. The complex of ideas, processes, and metaphors associated with alchemy furnished just such material.

[1] Caroline Spurgeon, Shakespeare's Imagery (Cambridge: University Press, 1958).

[2] Robert Kilburn Root, Classical Mythology in Shakespeare (1903; rpt. New York: Gordian Press, 1965) pp. 3-24.

Although it is greatly removed from modern responsiveness, Shakespeare's audience would have found it quite accessible--some of the ideas commonplace to them. And even in this age, one can recognize that alchemy is essentially dramatic in its nature. It involves the interaction of man and his world and the intra-action within all men--the very "stuff" of drama.

Even when it is amply demonstrated that there is sufficient reason to explore a possible relationship between alchemy and Shakespeare's work, the difficulties of approaching that subject are not ended. One needs a cohesive framework of alchemical ideas which might serve as a basis for comparison to literary works. There is a great abundance of comment on alchemy, but, as already suggested, the scientist, the mythologist, and others may and do approach the subject from very different angles and the results of their studies are amazingly various. Alchemy is eclectic. Throughout its development, it absorbed and incorporated much of whatever was in the air around it. It spread out and spilled over into almost every area of thought. Indeed, this amorphous characteristic was not entirely peculiar to alchemy in the times in which it flourished; one suspects, for instance that the lines of humanism as opposed to naturalism are clear only in retrospect. The alchemists, dear fools, like Causaban in Eliot's Middlemarch who devoted his life to finding the Key to All Mythologies, seem to have always had the attitude that they could be all things to all people. In fact, alchemy has been, in retrospect, not all things, but many different things to many different people, depending on the particular perspective from which it was approached.

Wayne Shumaker, in his study of the occult in the Renaissance, further illuminates the difficulty in pinning down exactly what alchemy is: "The role of analogy in the doctrines is so considerable that it may well have been germinal. A readiness to say that one thing is, or is like, another appears frequently in the claim that apparently different philosophical doctrines are identical."[1] Shumaker uses, as an example, a quotation from Robert Fludd: "when Aristotle wrote of the prima materia, Plato of the hyle, Hermes of the umbra honeda, Pythagoras of the 'symbolical unity' and Hypocrates of the deformed chaos, they were all writing in reality of the darkness or the dark abyss of Moses.[2] Shumaker goes on to note "that the readiness to say 'X is the same as Y' or if an equation cannot be made 'X exists alongside Y and is the same truth in another realm or dimension' characterizes much Renaissance thought and was only gradually to be replaced by its opposite, the modern fondness for distinctions."[3]

The modern scholar, then, is left in a very precarious position in regard to a study of alchemy. On the one hand, he must restrain the natural scepticism and distrust of a system which is foreign to his experience and way of thinking. On the other hand, he must avoid what the alchemical authors would encourage--seeing alchemy everywhere. Silberer offers some good advice. He speaks

[1] Wayne Shumaker, The Occult Sciences in the Renaissance: A Study in Intellectual Patterns (Berkeley: University of California Press, 1972), p. 193.

[2] Ibid.

[3] Ibid.

specifically of the tendency of the alchemists to "use interchangeably fifty or more names for a thing and on the other hand to give one and the same name many meanings,"[1] but his advice might be applied to a broader study: "Apart from a certain practice in the figurative language of the alchemists, it is necessary, so to speak, to think independently of the words used and regard them only in their context."[2]

What is needed, then, is a broad and general framework of alchemical assumptions and ideas through which to examine alchemy in specific literary contexts. Attempts to provide such a framework have occurred very infrequently. Joseph Mazzeo examined Donne's poetry in a serious effort to realize the philosophical implications of his alchemical imagery.[3] Unlike many of Donne's critics, who see the fairly obvious alchemical influence, but conclude that the poet "plays" with his conceits "with no design of presenting a comprehensive or coherent view of the universe and of man's place in it,"[4] Mazzeo believes that Donne's knowledge of alchemy was not superficial, but rather thorough and consistently used. W. A. Murray, in the article "Why Was Duncan's Blood Golden?" studies the imagery in one Shakespearean play, Macbeth, with the idea of suggesting what the imagery might imply in terms of alchemical ideas and what associations it would bring to mind for

[1] Silberer, pp. 118-19.

[2] Ibid., p. 119.

[3] Mazzeo, pp. 103-23.

[4] Marius Bewley, ed., The Selected Poetry of Donne (New York: Signit Classic, New American Library, 1966), p. xiii.

those familiar with alchemy.[1] Robert Steele lists a number of direct references to alchemy in Shakespearian plays, but does not pursue their implications in reference to the philosophy of alchemy.[2] Hiram Haydn, from the viewpoint of a literary historian, clarifies the relationship of alchemy to the thought of the period, suggests a number of possibilities for research, but, again, does not specifically apply alchemy to Shakespeare's plays. He does, however, clearly relate Marlowe's Dr. Faustus to prevailing alchemical ideas. Most of the other literary criticism which recognizes alchemy at all concentrates on its use as a ready and very apt metaphor for man's greed, vanity, and gullibility. While that metaphor is, without doubt, one of the ways in which alchemy is used, it is not the only way.

The following discussion will present, therefore, a relatively condensed and general framework of alchemical ideas which may then be applied to some specific uses of alchemical imagery in Shakespeare's plays and sonnets. No claims will be made that the ideas so presented are exclusive to alchemy, for, in fact, alchemy was never very exclusive about what it incorporated in its system. Nevertheless, a certain unity may be discovered, and viewing much examined passages through a new lens may provide additional insight and new perspective.

[1] W. A. Murray, "Why Was Duncan's Blood Golden," Shakespeare Survey, 19 (1966), 34-43.

[2] Robert Steele, Shakespeare's England, I (Oxford: Clarendon Press, 1910), pp. 465-67.

DEFINITIONS OF ESOTERIC ALCHEMY

Perhaps the first necessity is to realize what alchemy was not. It was not simply an early, primitive form of chemistry. F. S. Taylor comments about Greek alchemical authors, "We shall not find in alchemy any beginnings of a science. . . . At no time does the alchemist employ a scientific method . . . these men were not really interested in making gold and were not in fact talking about real gold at all. The practical chemist examining these works feels like a builder who should try to get practical information from a work on freemasonry."[1] This is not to say, of course, that alchemical texts were not read by many as method books for transmuting base metals into gold. Probably, in fact, some of the procedures for making alloys and for gilding were included in alchemical texts, particularly in the early Egyptian and Arabian texts whose authors may well have been familiar with the techniques of the metallurgists. Their intention, however, was not primarily scientific. The mystical, semi-religious tone of the works and the complete absence of comment about some obvious physical phenomena lead to this deduction. If, indeed, early alchemical experiments did lead to some practical applications and the development of the tools of chemistry, it was almost incidental. It was through the misinterpretation of the main intention of the works by practitioners, or perhaps because of the arousal of genuine scientific curiosity which occurred in spite of, rather than as a result of, the original direction taken in alchemy.

[1] F. S. Taylor, A Survey of Greek Alchemy, cited by Eliade, p. 110.

Mircea Eliade clarifies this point:

> It must be emphasized at the outset that alchemy was not, in its origins, an empirical science, a rudimentary chemistry. This it did not become till later when, for the majority of its practioners, its mental world had lost its validity and its raison de etre. The history of science recognizes no absolute break between alchemy and chemistry; the one, like the other, works on the same mineral substances, uses the same apparatus, and, generally speaking, applies itself to the same experiments. Insofar as one acknowledges the validity of the investigations into the origins of science and technology, the perspective of the historian of chemistry is perfectly defensible, chemistry was born from alchemy, or more precisely, it was born from the disintegration of the ideology of alchemy. But if we view it from the standpoint of the history of the human spirit, we see the matter quite differently. Alchemy posed as a sacred science, whereas chemistry came into its own when substances had shed their sacred attributes. Now there must, of necessity, be a break of continuity between the sacred and profane plane of experience.[1]

Eliade goes on to point out that for the "esoteric" alchemist, chemistry represented a kind of "Fall"; "it meant the secularization of a sacred science."[2]

Thus, the original motivation in alchemy was much more closely allied to religion and mysticism than to science. However, if one looks at its complete development, it becomes obvious that alchemy has a kind of double nature. In one sense it is exoteric, concerned with the material world and the transmutation of metals. In another sense, it is esoteric and concerned primarily with the spiritual world. The division between the two is not always clear. As Mazzeo explains, "The same alchemical allusion, the elixir or the limbeck, may refer to material or spiritual alchemy alone or

[1] Eliade, p. 9.

[2] Ibid., p. 11.

to both at the same time."[1] Still, it is helpful to keep firmly in mind that there are two distinct aspects to alchemy, and that only in context does one really discover a particular usage.

While it is clear that the materials of the exoteric alchemist were metals, it is not so obvious what the esoteric alchemist was working on or toward. In a recent English translation of an ancient Arabic text, supposedly revelations from Morienus to Khalid Ibn Yazid (660-704), Khalid repeatedly asks Morienus what material he is to work on. At least to the modern reader, Khalid never seems to get a completely satisfactory answer. Morienus tells him he must look within himself for the basic material: "It is cast in the streets and trampled in the dung, but let none take pains to extract it. . . . For this matter comes from you, you are yourself its source."[2] This kind of advice led some alchemists to begin their work with human excretions, manure, decaying vegetable matter, etc. The ubiquity of the matter was a very common theme. It was literally everywhere, although most did not recognize it, and it was one thing. Morienus indicates that "Although all the authorities used different names and maxims, they meant to refer to but one thing, one path, one stage."[3] Morienus' answers are deliberately veiled as are most of the instructions of other alchemists in order to protect knowledge of alchemy's secrets from

[1] Mazzeo, p. 104.

[2] Morienus, A Testament of Alchemy, ed., trans. Lee Stavenhagen (Hanover, New Hampshire: University Press of New England, 1974), p. 27. The revelations of Morienus to Khalid Ibn Yazid originally appeared in England in 1144, translated by Robert of Chester from the Arabic in Book of the Composition of Alchemy.

[3] Ibid., p. 19.

those who were unworthy. Morienus explains to Khalid that the true alchemist must be a chosen servant of God: "And from among his servants, he chose to select certain ones to seek after the knowledge he had established that rescues him who masters it from the wretchedness of this world and assures him riches to come, God willing."[1] Therefore, knowledge of alchemy cannot be dispensed to all and must be preceded by a process of purification and perfection in the operator himself: "No one will be able to perform or accomplish this thing which you have so long sought or attain it by means of any knowledge unless it be through affection and gentle humility, a perfect and true love. For this is something which God gives into the sure keeping of his elected servant until such time as he may prepare one to whom it may be handed on from among his secrets. Thus it is only the gift of God, who chooses among his humble and obedient servants those to whom he reveals it."[2] Another explanation which also emphasizes self-purification as the true "subject" of alchemy is provided by the alchemist Alipili:

> The highest wisdom consists in this, for man to know himself because in him God has placed his eternal Word. . . . Therefore let the high inquirers and searchers into the deep mysteries of nature learn first to know what they have in themselves and by the divine power within them let them first heal themselves and transmute their own souls . . . if that which thou seekest thou findest not within thee, thou will never find it without thee. If thou knowest not the excellency of thine own house, why does thou seek and search after the excellency of other things? The Universal Orb of the world contains not so great mysteries and excellencies as does a little man formed by God in his own image. And he who desires

[1] Morienus, p. 11.

[2] Ibid., p. 11.

> the primacy amongst the students of nature will nowhere find a greater or better field of study than himself. Therefore will I here follow the example of the Egyptians and . . . from certain true experience proclaim, O Man, know thyself; in thee is hid the treasure of treasures.[1]

This kind of statement is very prevalent in alchemical texts and examples could be presented from books widely separated in both time and place of origin. Suffice it to say that almost all later historians of alchemy agree that the basic material of esoteric alchemy was man himself. An American author, Ethan Alan Hitchcock, in Remarks Upon Alchemy and the Alchemists published in 1857, clearly states this conclusion:

> The work of the alchemists was one of contemplation and not a work of the hands. Their alembic, furnace, concubit, retort, philosophical egg etc., in which the work of fermentation, distillation, extraction of essences and spirits and the preparation of salts is said to have taken place was Man--yourself, friendly reader,--and if you will take yourself into your own study and be candid and honest, acknowledging no other guide or authority but Truth, you may easily discover something of hermetic philosophy, and if at the beginning there should be 'fear and trembling' the end may be a more than compensating peace.[2]

Not withstanding the friendly advice, this attitude may still seem a little peculiar to the twentieth century mind. It does, however, help to explain how, for instance, Arnold of Villanova could describe alchemy as "The Rosary of the Philosophers" implying, not just a series of laboratory exercises, but a kind of ritual ascension based on meditation and a carefully repeated series of steps. C. A. Burland in Arts of the Alchemists, presents

[1] Cited by Silberer, p. 153.

[2] Ibid., pp. 152-53.

an even more curious picture when he discusses:

> an altar and a priest who described visions of the soul's adventures in terms of the melting of ore and the purification and gilding of metals till one had become a shining golden spiritual being. The alchemical furnace on a small altar must have been a visual representation of the mystery. At the top one could see the movement and distillations of liquid and the deposition of mercury and its amalgamation with gold and repeated distillation to leave pure golden surfaces. The whole quadrature of the elements was apparent. Earth (stone or powdered ore) was entered and fire applied. Air rose in the form of gases and vapour, and Water of various kinds, like mercury and dilute acids, was distilled. For the initiates this was an object lesson of great significance. They had mysterious powers because the activity going on in the furnace and kerotakis on the altar produced wonderful results, which they hoped were also being reproduced in themselves. They must have been aware of the analogies of alchemy with life, and the actual construction of the human body.[1]

The scene presented is certainly colorful and interesting, if, perhaps, not historically verifiable. It does emphasize, however, an important characteristic of esoteric alchemy: the outer, visible processes carried on in the laboratory were thought of as material representations of more important spiritual and mental processes which were taking place within the alchemist himself.

THE WORLD AS CHEMICAL PROCESS

Definitions and commentary on esoteric alchemy lead inevitably to a realization of the comprehensive nature of this subject. Alchemy incorporates, not just a particular process (scientific or psychological or mystical), but a particular world view based on a collection of assumptions about the nature of the universe, the nature of Nature, and the nature of man. Although these assumptions

[1]Burland, p. 23.

were modified, or more accurately, expanded to include various additions as new philosophies and discoveries appeared, they retained a basic unity and cohesion. This collection of assumptions offers the greatest possibility for further study.

Of first importance is the view that all creation must be understood as a chemical process. Relying heavily on Genesis, the alchemists saw the initial creation of the world as a divine chemical separation and assumed that from that point on the universe continued to operate in chemical terms. Paracelsus wrote, "At the beginning of each birth stood the birth-giver and begetter --separation. It is the greatest wonder of the philosophies. . . . When the mysterium magnum in its essence and divinity was full of the highest eternity, separatio started at the beginning of all creation. And when this took place, every creature was created in its majesty, power, and free will. And so it will remain until the end, until the great harvest when all things will bear fruit and will be ready for gathering."[1] In other words, the beginning of all life, all change, all creativity, is a chemical separation, and the process continues until everything is brought to maturity or "harvest."

Some interesting ideas follow from this basic assumption. First of all, chemistry immediately attains a divine significance. As Debus explains, "It was the key to nature--all created nature. Both earthly and heavenly phenomena were thought of as chemical

[1] Paracelsus: Selected Writings, ed., Jolande Jacobe, trans. Norbert Guterman, 2nd ed., Bollingen Series, 28 (1951; rpt. New York: Pantheon Books, 1958), p. 15.

processes and interpreted in this fashion.[1] Thus, he who studies alchemy studies not merely the substances he works with but also himself, all men, all nature, the universe! The alchemist takes on the characteristics of a priest or prophet. He is God's Assistant, helping to carry on the divine chemical processes. God himself is the original alchemist who initiates the process and knows its direction. His assistants must listen for his instructions (thus, meditation, contemplation, and intuition) in order to understand and aid in completion.

Paracelsus defines alchemy in terms of this function: "Man must bring everything to perfection. This work of bringing things to their perfection is called alchemy. And he is an alchemist who carries what nature grows for the use of man to its destined end. . . . Nothing has been created as ultima materia--in its final state. Everything is at first created in its prima materia, its original stuff, whereupon Vulcan comes, and by the art of alchemy develops it into its final substance. . . . Accordingly, you should understand that alchemy is nothing but the art which makes the impure into the pure through fire."[2]

Jolande Jacobi, editor of Paracelsus: Selected Writings further explains the implications of this assumption: "For creation and everything belonging to it were released by God while they were still in an imperfect state. The created world has been given over to man in order that he may fulfill it. More than that: man's original and specific mission is to lead it to perfection; he has

[1]Debus, Chemical Dream, p. 15.

[2]Paracelsus, Selected Writings, pp. 92-93, 141-43.

been placed in the world solely for this purpose."[1] Thus is posited a chemical world and a very special place for the alchemist within it.

A second idea which develops naturally from the view of the world as chemical process is the idea of the interdependence of all facets of the universe. In other words, the world itself is a kind of enormous limbeck ("therefore, the Great World, the macrocosm, is closed in itself in such a way that nothing can leave it").[2] All materials within this closed vessel must, of necessity, affect each other. Because a process takes place within this vessel, there will be continual action and reaction between the materials. This is related to the concept of hylozoism; all matter is endowed with life and sensitivity, potential growth or decay. One suddenly begins to see the world in all its bubbling, fermenting, stagnating, heating, cooling, erupting, tincturing possibilities. From this point of view, the macrocosm-microcosm theory not only makes sense, it is a necessity. The heavens must reflect what is happening in the state or in man, just as man or the state must be affected by the heavens, since all substances are involved in the same chemical process. Likewise, all that is in the universe must also be in man; he is truly the microcosm, another limbeck on a smaller scale: "For what is not outside man is not inside. The outer and the inner are one thing, one constellation, one influence, one concordance, one duration--one fruit.[3]

[1] Jacobi, Paracelsus: Selected Writings, p. xlvi.

[2] Ibid., p. 17.

[3] Ibid., p. 21.

Of course, the macrocosm-microcosm theory is not unique to alchemy, although the alchemists did rely heavily on its use. George Perrigo Conger, in Theories of Macrocosms and Microcosms, suggests that Paracelsus was responsible for popularizing and emphasizing the concept in the sixteenth century: "The term 'microcosmus' or its equivalent is used by Paracelsus more often than any other writer--perhaps as much as by all the writers up to his time taken together. He was perhaps the originator of the term 'macrocosmus.'"[1] Other metaphors such as the Great Chain of Being or the Universal Dance, popular in the medieval world scheme, also express the same idea of the interdependence of all elements in the universe. But to see the relationship between man and his world as a specifically chemical relationship is perhaps unique to alchemy, at least in that time period. It resembles our modern views on ecology, overlaid with religious and moral purpose.

Along with the chemical relationship, alchemy assumed the underlying unity and sameness of all matter. All varieties of creatures and things were, in the beginning, separated and created out of the prima materia. This idea, of course, is linked with Aristotle's discussion of the constitution of matter, and from the Greeks the alchemists also take the four elements and the four humors. They, like Aristotle, obviously accept the possibility that any substance, by changing the proportions of its elements, may be altered to a different substance. E. J. Holmyard, in fact, interprets Aristotle's theories as the true root of alchemy, at

[1] George Perrigo Conger, Theories of Macrocosms and Microcosms (New York: Columbia University Press, 1922), p. 57.

least in its experimental aspect: "Here we have the germ of all theories of metallic transmutation and the basic philosophical justification of all the laborious days spent by alchemists over their furnaces. If lead and gold both consist of fire, air, water, and earth, why may not the dull and common metal have the proportions of its elements adjusted to those of the shining, precious one."[1]

In addition to a reliance on the four elements, the alchemists also depended on the sulphur-mercury theory. All matter contained two principles, sulphur and mercury. This idea first became visible in alchemy in the writings of Jabir or Geber, a ninth century Islamic alchemist. Basically it is an expression of the contraries or opposites contained in all things, and, as such, it seems more closely related to Eastern philosophy than Western. Sulphur and mercury represented fire and water, male and female, active and passive, volatile and fixed, etc. The alchemical process involved a struggle between these opposites and a final unification of the two opposing principles, often represented by the rebus or hermaphrodite. Perfection (the philosopher's stone) was achieved when quintessentialized (pure, fifth essence) sulphur and mercury were perfectly combined. Paracelsus introduced a slight variation on this theme by assuming three principles--sulphur, mercury, and salt. Sulphur represented spirit, mercury was soul, and salt was the fixating principle or body. Only when these three contraries existed in harmony could man be healthy and whole.

[1]E. J. Holmyard, Alchemy (1957; rpt. Baltimore: Penguin Books, 1968), p. 23.

The alchemists took commonly accepted theories and gave them a slight twist of their own. Again, the difference is based upon the assumption that the universe operates as a continuing chemical process. Here one finds a special view of Nature and how it functions in the universal scheme. Nature tends toward perfection. If left alone, Nature will eventually bring all substances to maturity or perfection. Nature is God's (the original alchemist) process. The alchemist, then, does not really change the process; instead, he speeds it up. He aids Nature in completing her task, more rapidly than she could do it alone.

In order to understand this idea, it is necessary to remember, once again, that alchemy is eclectic. Eliade supposes that this idea develops from the primitive mythology associated with miners and metallurgists and later becomes fused in alchemy with Greek ideas about the composition of matter. He discusses the very ancient premise that "the ores extracted from the mines are in some ways embryos: they grow slowly as though in obedience to some temporal rhythm other than that of vegetable and animal organisms. They nevertheless do grow--they 'grow ripe' in their teluric darkness. Their extraction from the bowels of the earth is thus an operation executed before its due time. If they had been permitted the time to develop (i. e. the geological rhythm of time) the ores would have become ripe metals, having reached a state of 'perfection.'"[1] Thus begins the idea of sanctity or a priest-like function associated with metal workers (or, from the opposite view, the suggestion of magic, evil intervention in powers not intended

[1]Eliade, p. 42.

for man!).

The idea easily transfers into the world view of the alchemist who also, of course, works with metals. Alchemical texts are full of the imagery of growing and ripening, always emphasizing the alchemical process as a natural one, either in the sense of simply speeding up an inevitable but slow development, or of completing an intended development which had, in some way, been prevented. The following quotation from the Biblioteque des Philosophies Chemiques illustrates the logic which serves as a foundation for the alchemical emphasis on growth and ripening:

> If there were no exterior obstacles to the execution of her designs, Nature would always complete what she wished to produce. . . . That is why we have to look upon the births of imperfect metals as we would on abortions and freaks which come about only because Nature has been, as it were, misdirected, or because she has encountered some fettering resistance or certain obstacles which prevent her from behaving in her accustomed way. . . . Hence although she wishes to produce only one metal, she finds herself constrained to produce several. Gold, and only gold, is the child of her desires. Gold is her legitimate son because only gold is a genuine production of her efforts.[1]

The alchemist assists Nature in producing her "legitimate son." He carries forward a process which is "ordained" "in potentia" as Jonson suggests in these lines from The Alchemist:

Surly: The egg's ordained by nature, to that end:
And is a chicken in potentia.
Subtle: The same we say of lead, and other metals
Which would be gold, if they had time (II, iii, 133-36).

Eliade clarifies how this view of Nature's intended progress expands to imply a priest-like function for the alchemist, not

[1]Cited by Eliade, p. 50.

only in relation to metals, but to all created matter:

> The 'nobility' of gold is thus the fruit at its most mature; the other metals are 'common' because they are crude; 'not ripe.' In other words, Nature's final goal is the completion of the mineral kingdom, its ultimate 'maturation.' The natural transmutation of metals into gold is inscribed in their destiny. . . . But since gold is the bearer of a highly spiritual symbolism . . . it is obvious that a new idea is coming into being: the idea of the part assumed by the alchemist as the brotherly savior of Nature. He assists Nature to fulfill her final goal, to attain her 'ideal', which is the perfection of her progeny -- be it animal, mineral or human -- to its supreme ripening which is absolute immortality and liberty (gold being the symbol of sovereignty and autonomy).[1]

Again, it should be emphasized that the alchemist does not think of himself as imposing change on what nature has created; he merely speeds up the process or aids in its completion. Eliade explains, "In a word, man, with his various techniques, gradually takes the place of Time: his labours replace the work of Time."[2] Thus we have, in a fourteenth century document attributed to Geber, the ultimate claim of the alchemist: "What Nature cannot perfect in a very long space of time that we compleat in a short space by our artifice.[3] The idea is not so strange when we consider modern scientific work with atomic materials. Curiously enough, however, the end product is lead instead of gold.

The alchemist, then, stands in intimate relationship to both Nature and Time. There are constant admonitions in alchemical texts that the "timing" must be right, that materials must "ripen" before they can be transmuted, and that process must be respected

[1] Eliade, p. 51.

[2] Eliade, p. 8.

[3] Summa Perfectionis, cited by Read, Prelude to Chemistry, p. 49.

through a careful step by step development. One should remember, also, the tendency of the alchemist to analogize. When he speaks of aiding the maturation of "gold" he is not necessarily speaking of gold as a metal, or at least not of that alone. Thanks to the unity of the microcosm-macrocosm, there is a correspondence between the process carried on in the laboratory and the processes taking place within the adept and the world at large. What happens in the alembic equals what happens in man equals what happens, ultimately, in nature. Wayne Shumaker states, "In such ways as these the theory approximated the behavior of metals--and sometimes of organic substances--to relationships and processes which, like the transactions of men with one another and with sensate creatures, had something of the quality of drama."[1] One begins to sense the excitement of the alchemical activity--the suspense and the dramatic tension involved, the feeling that all of life is momentarily contained and illuminated in the small space and short time of a stage or an alembic. How could they repeat the process again and again, for years, with devotion and patience and expectant excitement? In the same way one returns again and again to the theater, a fantasy which yet, in some sense, represents the deepest involvement in life. Who does not finally believe in, or at least hope for, transformation?

At this point it is necessary to return to a point which has been suggested, but not fully explored. Nature, even though her tendency is toward perfection, may produce "abortions," "freaks," unnatural abberations. Her progress may be interfered with,

[1]Shumaker, p. 197.

"fettered," and filled with obstacles. Now it becomes apparent that alchemy also incorporates Christian theology, for the first and foremost interference occurred in the Garden of Eden. Hiram Haydn explains this concept:

> "for most alchemists and Hermetic philosophers that Golden Age of Wisdom when God revealed the true significance of Nature's symbols was the Age of Innocence in Eden; the 'illumined priest' was pre-lapsarian Adam. The central concern of the Hermetic philosophers with the 'rejuvenation and renovation of men and things' then is a logical sequiter. When Paracelsus declares, 'This, therefore, is the most excellent foundation of a true physician, the regeneration of nature and the restoration of youth', he is writing in this tradition. Before the Fall, man understood the symbols of Nature, for God had revealed them to him. After the Fall, this secret knowledge, this infused capacity to interpret their meanings, was gradually lost--until the words of the interpretations became cryptic and even unintelligible. It was the task and dream of the alchemist to be able to effect a return to the purity of the youth of the world, to men who once more might understand 'God's images' and to a renewed Nature whose hidden virtues need no longer to be hidden."[1]

Complications abound. The alchemist, one now realizes, must go back in order to go forward. Before he can assist in Nature's progress toward perfection he must "rejuvenate" nature and himself. He must discover what is hidden. Of course, he cannot do this on his own, because he himself is corrupt. He must depend on revelation, "the light of nature" as Paracelsus calls it, to become aware again of his own and Nature's original character. He is a priest, a prophet and a magician, for magic, as Pico says,

> in calling forth into the light as if from their hiding places the powers scattered and sown in the world by the loving kindness of God, does not so much work wonders as diligently serve a wonder-working nature. . . . It making use of the suitable and peculiar inducements . . . for each single thing, brings forth into the open the

[1] Haydn, p. 514.

> miracles concealed in the recesses of the world, in the depths of nature, and in the storehouses and mysteries of God, just as if nature herself were their maker. And, as the farmer weds his elms to vines, even so does the magus wed earth and heaven, that is, he weds lower things to the endowments of higher things.[1]

In Pico's explanation of magic, just as in the alchemists' view of their own roles, the emphasis is on a mysterious co-operation with Nature. In both instances, it is assumed that man can, through his own labours, aid Nature in uniting "lower things to the endowments of higher things." Paracelsus sounds a bit more egotistical when he describes himself and his role in terms of this miraculous relationship with Nature:

> From the middle of this age the Monarchy of all the arts has been at length derived and conferred on me, Theophrastus Paracelsus, Prince of Philosophy and of Medicine. For this purpose I have been chosen of God to extinguish and blot out all the phantisies of elaborate and false works, of delusive and presumptuous words. . . . My theory preceeding as it does from the light of Nature, can never though its consistency, pass away. . . .
>
> Not that I praise myself. Nature praises me. Of her I am born, her I follow. She knows me, and I know her. The light which is in her I have beheld in her, outside, too. I have proved the same in the figure of the microcosm, and found it in the universe.[2]

It is possible to be a little more specific about <u>how</u> the alchemist overcomes that initial interference (the Fall) and returns his material and himself to a state in which Nature's intended progress may be carried on. In essence, he simply starts

[1]Pico della Mirandola, <u>Oration on the Dignity of Man</u>, trans. Charles Glenn Wallis (1940; rpt. New York: Bobbs-Merrill Co., 1965), p. 28.

[2]Paracelsus, Preface to "Book Concerning the Tincture of Philosophers," <u>The Hermetic and Alchemical Writings of Paracelsus the Great</u>, ed. Arthur Edward Waite, II (New Hyde Park: New York: University Books, 1967), pp. 19-20.

over. The first step in his process is dissolution, which as George Ripley explained in his Compound of Alchemy is intended to reduce "the hard and dry compactyon to become "intenuate" (thin, liquid). . . . Every metal was ons water mynerall/Therefore wyth water they turne to water all."[1] In other words, he goes back to the prima materia: "When the world was still nothing but water, and the spirit of the Lord moved upon the face of the waters, the world emerged from the water, water was the matrix of the world and all its creatures. . . . The matrix is invisible and no one can see its primal substance, for who can see that which was before him?"[2]

The alchemist must go back before he can go forward. He must return to the undifferentiated chaos to begin again the process of separation and development. The importance of this step is continually emphasized in alchemical texts, as, for instance, in this quotation from Alphonso, King of Portugal: "Our dissolution is no other thing but that the body be turned again to moistness. . . . The first result of this work is the body reduced to water, that is to Mercury, that is what the Philosophers call solution, which is the foundation of the work."[3] Always, the correspondence between man and his material is maintained. The Sophic Hydrolith, an early study of alchemy, shows, "If we men would be purified and cleaned of our original sin and the filth of Adam . . . we can obtain per-

[1]George Ripley, Compound of Alchemy, found in the collection Theatrum Chemicum Britannicum, Elias Ashmole, comp. (1652; rpt. New York: Johnson Reprint Corporation, 1967), p. 136.

[2]Paracelsus: Selected Writings, p. 13.

[3]Cited by Read, Prelude to Chemistry, p. 137.

fection and eternal happiness only through the regeneration of water and the spirit, as the royal chemical substance is regenerated by water and its spirit.[1]

RELATIONSHIPS WITH RELIGION, PSYCHOLOGY, AND MYTH

Obviously, the alchemical assumptions about dissolution and regeneration have many correlations with religion, psychology, and myth. In terms of religion, the process is a kind of New Birth. Following the example of Christ, one must submit to death (dissolution) in order to conquer it. In order to regain a sense of unity with the divine nature, one must die and be born again. According to the Bible, "Except a grain of wheat fall into the ground and die it abideth alone; but if it die it bringeth forth much fruit. He that loveth his life shall lose it and he that hateth his life in the world shall keep it unto life eternal" (John, XII, 24ff). The alchemists were fully aware of the parallels between their own chemical process and the process of Christian regeneration. In fact, they very often used the language and imagery of religion to explain what they were doing. An appropriate example is taken from the Sophic Hydrolith: "Again, as our chemical compound . . . is subjected to the action of fire, and is decomposed, dissolved, and well digested, and as this process, before its consummation, exhibits various chromatic changes, so this Divine Man and Human God, Jesus Christ, had, by the will of his heavenly Father, to pass through many troubles,

[1]Cited by Shumaker, p. 189.

insults, and sufferings, in the course of which His outward aspect was grievously changed."[1] Each step of the process could, in some sense, be correlated with religious experience. The Dissolution was the mystical death, the Separation was likened to rejection of the impurities and superfluities of the world, the Conjunction was a renewed awareness of divine unity, the Putrefaction equaled the sufferings, the 'trial by fire,' purgatory, the Congelation suggested the whiteness of resurrection, the Exaltation meant identification with Christ ("I exalted be/Then shall I draw all thyngs unto me"), and finally, the Multiplication and the Projection implied that the material might now, like Christ, be capable of the transmutation of other "metals" or men. One of the ways of speaking of the philosopher's stone was, in fact, to liken it to Christ. The Sophic Hydrolith explains, "as the Philosopher's Stone, which is the chemical King, has virtue by means of its tincture and its developed perfection to change other imperfect and base metals into pure gold, so our heavenly King and fundamental corner stone, Jesus Christ, can alone purify us sinners and imperfect men with his Blessed ruly-colored tincture, that is to say, His Blood."[2] The alchemical process, thus, is often equated with religious regeneration. In this sense, the alchemist engages in a spiritual experience.

If one turns to psychology to understand the alchemical process, a different view emerges. Carl Jung, in very extensive studies

[1] Shumaker, p. 188.

[2] Ibid.

of alchemy, concluded that the "art" was a psychic operation and that its process corresponded exactly to his own theory of individuation. The alchemist in his search for the Philosopher's Stone was, in effect, searching for his own wholeness, an awareness of self which included his total personality, both conscious and unconscious. Thus, the first step, the return to the prima materia, was a journey into the unconscious, an attempt to reveal what was "hidden" and reintegrate that material. A resemblence is established between the prima materia and the chaotic state of unconsciousness, and the alchemical process then becomes a process of psychic growth. When the alchemist breaks down his material, "tortures" it, refines it, purifies it, and reunites its ingredients in a new whole, he is working upon his own psyche. He is making what was unconscious, conscious. Again, interesting parallels can be drawn with the various steps in the alchemical process. The initial steps are often referred to as nigredo, named this because of the blackness associated with these first steps. The nigredo corresponds, for Jung, to deep depression, the melancholia of the alchemists.[1] The succeeding steps of repeated distillations, which "torture" the material, can be linked to the severe mental torture which occurs when one encounters the "shadow" of psychology. Jung points to a quotation from the "Tractatus Micreris": "It must be tormented with the most subtle spiritual thing, namely with the fiery nature which is akin to it. For if its body were tormented, the soul would not reach it; for it is of spiritual

[1]Jung, Psychology and Alchemy, p. 36.

nature to be touched only by something spiritual."[1] The final steps lead to a product which Jung equates with "new energy and new life."[2] His own experience verified these qualities in people who produced in their dreams and fantasies "symbols similar to, and often identical with . . . the formulation of such esoteric cults as alchemy."[3] Thus, Jung concluded that "the most important discoveries of the alchemists sprang from their meditations on their own psychic processes, which, projected in archetypal form into the chemical substances, dazzled their minds with unlimited possibilities."[4]

Jung does not believe, however, that the initial goal of alchemy was a psychic process or that the alchemist was necessarily aware that he was dealing with the unconscious. As he explains, "The real nature of matter was unknown to the alchemist: he knew it only in hints. In seeking to explore it he projected the unconscious into the darkness of matter in order to illuminate it. . . . This procedure was not, of course, intentional; it was an involuntary occurrence. Strictly speaking, projection is never made; it is simply there."[5] Thus, Jung suggests that the language of the

[1] Jung, Alchemical Studies, p. 330.

[2] Jung, "Prefatory Note to the English Edition," Psychology and Alchemy, p. v.

[3] Ibid.

[4] Jung, Alchemical Studies, p. 330. Luther H. Martin, "A History of the Psychological Interpretation of Alchemy," Ambix 22 (1975), 10-20, provides a good summary of psychological interpretation of alchemy, including reference to the works of Hitchcock, Silberer and Jung. Another helpful synthesis of alchemy as a form of psychology is given by Mary Jo Teeter Dobbs, pp. 26-39.

[5] Jung, Psychology and Alchemy, pp. 244-45.

alchemists was not mystifying in order to conceal secrets or exploit the credulous, but simply because the alchemists dealt with processes which, even though they experienced them, remained essentially unknown or mysterious to them. Nevertheless, he does find some awareness in alchemical texts of psychic experience, even though "unconscious" experience would normally escape record. These are recorded in the form of visions or hallucinations. The alchemical process itself may be presented as a dream, as in the "Visions of Zosimos" which Jung thoroughly explicates.[1]

A great deal more could be said about Jung's theories concerning alchemy, but the primary purpose here is to demonstrate that what the alchemists perceived as a chemical breakdown or return to prima materia in order to prepare material for its natural progress toward perfection had multiple associations with religious and psychological processes. One further correlation should be considered. In terms of myth, the alchemical process resembled the initiation ritual. From this viewpoint, the "testing" of materials, the submission to the purifying fire, becomes the most important aspect. The materials must "suffer", "die" and be reborn into another mode of being. In this sense, "the alchemical regression to the fluid state of matter corresponds . . . to the 'death' of the initiate."[2] Through a series of tests, he is refined and purified and emerges with a new sense of identity. As Eliade explains, "Now one is in a position to measure the extent of the

[1]Jung, Alchemical Studies, pp. 66-108.

[2]Eliade, p. 153.

alchemists' innovation: they projected on to Matter the initiatory function of suffering. Thanks to the alchemical operations, corresponding to the tortures, death and resurrection of the initiate, the substance is transmuted, that is, attains a transcendental mode of being: it becomes gold."[1]

In fact, a great deal of emphasis in alchemical texts is placed on the trial by fire, often used in a metaphorical sense. Paracelsus wrote, "For every person may and ought to believe in another only in those matters which he has tried by fire . . . since, experimentally, through the agency of fire the true is separated from the false."[2] And Morienus tells Khalid, "Fire is the true test of this entire matter."[3] Emphasis is placed on experience; one must survive a testing process in order to achieve unification: "Now I have shown that this operation is at no great remove from the living things, nor was anything ever born or endowed with spirit or growth except after putrefaction and change of appearance."[4] Much of the iconography of alchemy illustrates the blackness and suffering associated with initiatory "death"--saturnine symbolism, melancholy, contemplation of skulls.[5]

The gods of mythology are employed by the alchemists to represent the necessity of testing and trial before one reaches the goal. Thus, the twelve labors of Hercules become the steps

[1]Eliade, p. 151.

[2]Paracelsus, Hermetic and Alchemical Writings, Vol. II, p. 21.

[3]Morienus, A Testament of Alchemy, p. 47.

[4]Ibid., p. 31.

[5]Eliade, p. 161.

of the alchemical process, and his final triumph over the dragon (a very commonly used symbol in alchemy) allows him to capture the golden apples of the Hesperides (another way of saying the philosopher's stone).[1] Jason's long and perilous search for the golden fleece is another representation of the alchemical process, with each incident in the journey equated to a particular step and the fleece, of course, equated to the philosopher's gold. The parallels between mythological figures and alchemical symbolism are almost endless. The initiation tests which are so much a part of mythology and result in freedom, illumination and immorality become, in alchemical terms, the process which leads to transmutation.

Part of the attractiveness of the new Paracelsian medicine in the sixteenth century was due to this continual emphasis on trial and experience. R. Botocke, who introduced Paracelsian thought to England, compared the traditional scholars to the new chemical physicians, who try "all things by fire whereby the vertue, nature, and propertie of each thing appeareth to the palpable and visible experience. . . ."[2]

To review: the alchemist assumes a world which operates as a

[1]Sadler explains further correlations between Hercules and the alchemical process; his sweeping of the Augean stables as "related to the application and control of heat at various stages of the work by the use of dung, his encounters with serpents and dragons, his slaying of the "lion," p. 120. Sadler points to the sketch on the title page of Michael Maier's Atalanta Fugiens, a representation of Hercules in the Hesperian Garden, and a discussion of that "symbolic drawing" by the attendant alchemists at the court of Rudolph II, p. 121. She relates Greene's use of the Hercules incident in Friar Bacon and Friar Bungay to alchemical symbolism.

[2]"The difference between the Ancient Physicke and the Latter Phisicke," (London, 1585), cited by Debus, Chemical Dream, pp. 11-12.

chemical process, a Nature which tends toward perfection, but has been fettered by interference, and a process through which Man (the adept) may restore and participate in a new balance. He incorporates in his world view, in ever extending circles, much of Greek and Christian philosophy, psychology, and myth. (The list does not really stop there, but for a general framework one must stop somewhere.) He sees Man as very important in the scheme of the universe, but not because of his own powers: "Almighty God in his power created powerless servants who can neither undo what he has done nor advance what he holds back, nor can they ever know anything except what he grants to them nor are they able even to possess anything except by the strength that same God has conferred upon them, or even govern their own spirits except insofar and so long as he has ordained for them."[1] Thus, along with the scientists and the Calvinists, he distrusts scholasticism and advocates a return to first principles (although his idea of first principles differs from the Calvinistic idea of the apostalic church or the scientific insistence on objective empiricism). For the alchemist all knowledge comes from one source: "those who are called to the work must realize under Divine leading, that the knowledge (1) of God (2) of Christ whom he has sent (3) of the greater world (4) of the self within each of us and (5) of the Stone sought by the Wise--though passing under so many names--is one knowledge, which is attained by virtue of a single gift, faculty, or grace resident

[1]Morienus, Testament of Alchemy, p. 11.

within seekers themselves and comparable to a clear mirror or fountain."[1] The source of this knowledge is everywhere, but recognised by only a few. Those who attain it may multiply their results and tincture all the substances contained in the great limbeck of the universe.

EMERALD TABLE

All of the above ideas are suggested, although rather obliquely, in the Emerald Table or Tabula Smaragdina, which is perhaps the most celebrated and basic expression of alchemical ideas available. The Table is attributed to Hermes Trismegistus; some say it was found in a cave by Sara, the wife of Abraham, and others attribute its discovery to Alexander the Great. Its origin is not really certain, but it is certainly one of the oldest and most respected of alchemical documents. Since the table is relatively short and provides a kind of summary of the ideas presented above, it is repeated here in full.

> True it is, without falsehood, certain and most true. That which is above is like to that which is below, and that which is below is like that which is above, to accomplish the miracles of one thing.
>
> And as all things were by the contemplation of one, so all things arose from this one thing by a single act of adaptation.
>
> The father thereof is the Sun, the mother the Moon.
>
> The Wind carried it in its womb, the Earth is the nurse thereof.
>
> It is the father of all works of wonder throughout the whole world.
>
> The power thereof is perfect.

> If it be cast on to Earth, it will separate the element of Earth from that of Fire, the subtle from the gross.
>
> With great sagacity it doth ascend gently from Earth to Heaven.
>
> Again it doth descend to Earth, and uniteth in itself the force from things superior and things inferior.
>
> Thus thou wilt possess the glory of the brightness of the whole world, and all obscurity will fly far from thee.
>
> This thing is the strong fortitude of all strength, for it overcometh every subtle thing and doth penetrate every solid substance.
>
> Thus was this world created.
>
> Hence there will be marvellous adaptations achieved, of which manner is this.
>
> For this reason I am called Hermes Trismegistus, because I hold three parts of the wisdom of the whole world.
>
> That which I had to say about the operation of Sol is completed.[1]

This fundamental statement of alchemical doctrine emphasizes the following: the one source of all, the identity of microcosm and macrocosm, the unification of opposites, the penetrating, tincturing force, and the continuing process of creation. It offers to the followers of Hermes Trismegistus, the alchemists, the "wisdom of the whole world."

[1] Cited by Holmyard, Alchemy, pp. 97-98. The Emerald Table of Hermes is presented as a basic doctrinal statement in most surveys of alchemy. There are slight, but not significant, variations in different translations. Roger Bacon, The Mirror of Alchemy (1597; rpt. Ann Arbor, Michigan: Xerox University Microfilms, 1975), pp. 17-27 presents an explication of each line of the Table.

Chapter 2

THE ALCHEMIST AS PRIEST, PHYSICIAN, AND MAGICIAN

Alchemy, in its broadest conception, was the art of assisting Nature. Rejuvenation, regeneration, transformation, and restoration were its key words. To the alchemists, it made little difference whether one applied those words to "diseased" metals, "sick" souls, ailing bodies, or an unbalanced universe. By analogy, the process of rejuvenation was essentially the same in all cases. The philosopher's stone could transmute base metals to gold, the elixir could restore health and long life to the physical body, the operation of virtue could tincture base men and rejuvenate an unhealthy world. Some saw the alchemist as a kind of priest, some spoke of him as a physician, and some equated his seemingly supernatural powers with those of white magic. Of course, when the process obviously didn't work, the alchemist was simply a fool or a charlatan. Shakespeare utilized all of these viewpoints in alchemical references in his plays.

Once one accepts alchemy as a legitimate body of thought and a potential influence on literature, there are endless areas to be explored. Even in regard to a single author, Shakespeare, the task of intensively examining all the works from this new perspective is beyond the scope of a single paper. Nevertheless, it is possible to present examples of the ways that alchemical ideas and imagery infiltrate the drama of Shakespeare and to give intensive examination to one play, Hamlet. Such an approach will necessarily

be incomplete, leaving much unexplored territory, but, at the same time, it may provide a starting point and suggest areas for further inquiry. The broad conception of alchemy as an art of rejuvenation and restoration suggests that it might be particularly appropriate to the patterns of the histories and the tragedies. Its emphasis on "curative" powers might make it pertinent to those plays concerned with "disease" in one form or another. Realizing that in the period in which Shakespeare wrote, alchemy was most popularly associated with the "medicine" of Paracelsus, and the "magic" of John Dee, one would expect to find those influences mixed with other traditional alchemical ideas. Considering that Paracelsus was in large part responsible for popularizing and extending the macrocosm-microcosm analogy, one might look for alchemical influence in those plays which especially emphasize that concept. Perhaps the place to begin, therefore, is with those massive eruptions of the universal order in Julius Caesar, Macbeth, and King Lear.

JULIUS CAESAR: RESTORING THE STATE

In the ancient Roman world of Julius Caesar a crisis is brewing, as evidenced by strange disruptions in the universe. Casca questions, "Are not you mov'd when all the sway of earth/ Shakes like a thing unfirm?" (I, iii, 3-4).[1] He states that he has

[1]References for Shakespeare's plays are to The Complete Plays and Poems of William Shakespeare, eds. William Allan Neilson and Charles Jarvis Hill, New Cambridge Edition (Cambridge, Massachusetts: Houghton Mifflin, 1942).

witnessed "a tempest dropping fire" (I, iii, 10), a slave who

Held up his left hand, which did flame and burn
Like twenty torches join'd and yet his hand
Not sensible of fire, remain'd unscorched (III, iii, 16-18),

a lion "who glaz'd upon me" (III, iii, 21), and woman "who swore they saw/Men all in fire walk up and down the streets" (I, iii, 24-25). Obviously it is the element of fire which dominates Casca's description. Even the lion belongs in this group of images; it is a commonly pictured alchemical symbol representing the volatile, active, penetrating principle--the principle of sulphur or fire. As in Hamlet, this fire burns with more light than heat. It behaves mysteriously, portentiously. Casca concludes,

Either there is a civil strife in heaven
Or else the world, too saucy with the gods,
Incenses them to send destruction (II, iii, 11-13).

Cassius, however, does not agree that these forces are the results of the gods' activities. He sees them as a direct reflection of the unbalanced, "diseased" condition of the state. The macrocosm and the microcosm are joined in the same chemical process and must mutually "erupt" when the elements reach a state of imbalance. The condition of the universe is analogous to the condition of Rome where,

Now could I, Casca, name to thee a man
Most like this dreadful night,
That thunders, lightens, opens graves, and roars
As doth the lion in the Capitol. . . .

A man no mightier than thyself or me

In personal action, yet prodigious grown

And fearful, as these strange eruptions are (I, iii, 72-78).

The universal disorder is only a more visible reflection for Cassius of another disorder in which

all these things change from their ordinance

Their natures and preformed faculties

To monstrous quality (III, iii, 66-68).

The disturbances seem much more "natural" to Cassius than to Casca, in the sense that one inevitably follows upon the other. When Casca asks, "Who ever knew the heavens menance so?" (I, iii, 44), Cassius replies, "Those that have known the earth so full of faults" (I, iii, 45).

Paracelsus wrote that the spagiric art was able to create men and monsters. Cassius suggests that the process taking place in Rome fosters this monstrous quality. Caesar grows large from the "rankness" of the material surrounding him:

What trash is Rome,

What rubbish and what offal, when it serves

For the base matter to illuminate

So vile a thing as Caesar (I, iii, 108-11).

There is a sense of decay, oe'rgrowth, impurity. The tainting influence is present. Predictably enough, the conspirators must think of themselves as alchemists, offering a tincture which will transform their world. Brutus, in this sense, is the perfected material, and Cassius is the motivating force which will expose and bring that material into process.

Cassius works upon Brutus as the alchemist would work to prepare his material. He is well suited for the role: "He is a great observer, and he looks/Quite through the deeds of men" (I, ii, 202-3). Like the alchemist, he is a brooding observer, a man who would see beneath the surface of the visible world. He is melancholic in temperament. He would be the mirror (a commonly used expression in alchemy, as in Roger Bacon's Mirror of Alchemy) which reflects the hidden qualities of men and materials. He tells Brutus,

> And it is very much lamented, Brutus,
> That you have no such mirrors as you will turn
> Your hidden worthiness into your eye
> That you might see your shadow (I, ii, 55-58).

He goes on to state that he will be the mirror to expose Brutus' value:

> And since you cannot see yourself
> So well as by reflection, I, your glass,
> Will modestly discover to yourself
> That of yourself which you yet know not of (I, ii, 67-70).

Carl Jung might see the above speeches in light of his own theory of alchemy--a process which brings the unconscious to the surface, a confrontation with the "shadow" of psychology. Cassius will expose that which Brutus has hidden from himself. He will separate and eliminate the "fault" which has prevented Brutus from realizing his potential. The method to be used is self-examination, a kind of dissolution and analysis: "The fault, dear Brutus, is not in our stars,/But in ourselves, that we are underlings" (I,ii,140).

Cassius thinks and speaks of Brutus as if he were a substance,

potentially gold, but needing the proper handling:

> Well, Brutus thou art noble; yet I see
> Thy honourable metal may be wrought
> From that it is disposed (I, ii, 312-14).

Brutus' "noble metal" might be the gold which could infect the world around him, but Nature's intentions have been diverted. It is Cassius' purpose to reverse that process of corruption. He sees Brutus as the potential tincture in a process meant to transform the state:

> And that which would appear offence in us,
> His countenance, like richest alchemy,
> Will change to virtue and to worthiness (I, iii, 158-60).

Cassius' motives are not beyond question. He often seems as much concerned with personal ambition and his own bitterness as he does with the welfare of the state. He would use Brutus as the false alchemist would use gold--to further his own ends. This kind of thinking is also evident among some of the other conspirators, who would use Cicero's "silver" as a currency to buy their own security:

> Oh, let us have him, for his silver hairs
> Will purchase us a good opinion
> And buy men's voices to commend our deeds (II, i, 144-46).

Brutus, however, sees the conspiracy as a mission of purification and rejuvenation. He, somewhat like Hamlet, thinks of himself as a minister and scourge. He says, "Let us be sacrificers, not butchers, Caius. . . . We shall be called purgers, not murderers" (II, i, 166, 180). He thinks in terms of a necessary,

"not envious", purpose. He speaks of the entire enterprise in terms easily associated with alchemical ideas and processes. It is motivated by "the face of men/The sufferance of our souls, the time's abuse" (II, i, 114-15), all factors upon which the alchemists predicate the necessity of a cleansing, purifying process. It operates by fire and a conversion of baser substances:

> But if these,
> As I am sure they do, bear fire enough
> To kindle cowards and to steel with valour
> The melting spirits of women, then countrymen,
> What need we any spur, but our own cause
> To prick us to redress? (II, i, 119-24).

He assumes that the process, once set in motion, will generate its own force and naturally convert "cowards" and "melting spirits" to the cause. Oaths (implying doubts) and artificial bonds are not necessary, because they are extraneous to the process; they suggest impurities in the nature of the enterprise:

> but do not stain
> The even virtue of our enterprise,
> Nor th' insuppressive mettle of our spirits
> To think that or our cause or our performance
> Did need an oath. (I, i, 132-35).

Brutus thinks of the conspirators' actions as having curative powers--"A piece of work that will make sick men whole" (II, i, 327). Ligarius responds to Brutus as if he is the magic elixir which will bring new life and health:

By all the gods that Romans bow before,
I here discard my sickness! Soul of Rome!
Brave son, deriv'd from honourable loins!
Thou, like an exorcist, hast conjur'd up
My mortified spirit. Now bid me run
And I will strive with things impossible (II, i, 321-25).

Like a priest, a physician, or a magician, Brutus speaks and is spoken of in terms associated with alchemy. No other framework ties those three concepts together as does alchemy. Brutus envisions a process of restoration. He would apply to the state the same kind of process that the alchemist uses to make "sick" metals "whole." The conspirators do, however, realize the terror and destruction implicit in their plans for Rome's regeneration. Brutus cries,

O, that we then could come by Caesar's spirit,
And not dismember Caesar. But alas,
Caesar must bleed for it! (II, i, 168-71).

The dismemberment of the king or the lion (Caesar has been identified with the lion) is a familiar theme in alchemy, particularly in alchemical parables, dream visions, and the iconography of alchemy. It is contained, for instance, in the alchemical parable which Silberer relates and then interprets through both psychological dream analysis and alchemical symbolism.[1] The conspirators, of course, will not actually "dismember" Caesar, but Brutus, at

[1]Herbert Silberer, Hidden Symbolism of Alchemy and the Occult Arts, trans. Smith Ely Delliffe (1917; rpt. New York, Dover Publications, 1971) pp. 1-145). Silberer presents numerous parallels between the dismemberment theme in alchemy, in myth, and in psychology.

least, thinks of what they plan in this ritualistic tradition: "Let's carve him as a dish fit for the gods" (II, i, 173). He believes that he is involved in a sacred process, which, through destruction, will generate new life. It is an old, old theme in myth which is incorporated and vivified in the metaphors of alchemy. It makes the conspirator's work, as Cassius says, like "the complexion of the element. . . . Most bloody, fiery, and most terrible" (I, iii, 128, 30).

In the alchemical parables which deal with the "slaying" of the lion, particular emphasis is placed upon the blood of the lion. In the parable which Silberer uses as an example, for instance, the initiate literally squeezes the blood from the lion's body: "I forced the blood out of his body, yea, even out of his heart."[1] The act is not entirely one of destruction, however, for the initiate is then told by his "elders" that, "He must bring him [the lion] to life again, else he can not be our colleague."[2] The blood is an essential ingredient in the process which leads to the philosopher's stone. It is a tincturing, purifying agent. In this play, there is repeated emphasis on Caesar's blood. The conspirators literally cover themselves with it, at Brutus' direction. That fact has caused some uneasiness about the interpretation of Brutus' character. The bloody imagery of the assassination scene seems to suggest that Brutus might be classified with other, less admirable, agents of murder and violence. Yet he remains, even

[1]Silberer, Hidden Symbolism of Alchemy and the Occult Arts, pp. 3-4.

[2]Ibid., p. 4.

to the last lines of the play, a character of great strength and nobility:

His life was gentle, and the elements
So mix'd in him that Nature might stand up
And say to all the world, "This was a man!" (V, v, 73-75).

He is, to the very end, perfected material. Yet how can that viewpoint be justified in light of his activities earlier in the play? How can Brutus remain "gentle", perfectly "mix'd", a paridigm of man, when he is visually covered with the blood of Caesar? Only if one sees the blood-letting in a special sense. Shakespeare provides the material for that interpretation, for Caesar's blood is pictured as a kind of tincture, a rejuvenating force.

In Calpurnia's dream, Caesar's statue, "like a fountain with a hundred spouts/Did run pure blood" (II, ii, 77-78). The use of "fountain" is significant for it implies that Caesar's blood is the source of new life and regeneration. Men will "bathe their hands in it" (II, ii, 79), suggesting washing and purification. Decius summarizes this kind of interpretation in his analysis of the dream:

Your statue spouting blood in many pipes,
In which so many smiling Roman's bath'd
Signifies that from you Rome shall suck
Reviving blood, and that great men shall press
For tinctures, stains, relics, and recognizance (II, ii, 85-89).

Caesar's blood will become a tincture and, although it is not exactly what the conspirators expect, it will lead to the restoration at the end of the play. Again, one senses the almost inevitable

kind of movement toward restoration which is present in so many of Shakespeare's plays. The movement is mysterious in a sense; it involves forces which are beyond man's logical comprehension. Man participates in the process, but is not entirely in control of it.

Brutus alone, perhaps, does envision a process of rejuvenation which will come about through the release of Caesar's blood. (Decius' dream interpretation has other purposes, namely to encourage Caesar to go to the senate; he is not conscious that he speaks the truth.) It is with a recognition of the tincturing quality of Caesar's blood that Brutus instructs the conspirators to cover themselves with it, as if the blood symbolizes "peace, freedom, and liberty"--the ruby colored tincture which will transform the world:

> And let us bathe our hands in Caesar's blood
> Up to the elbows, and besmear our swords,
> Then walk we forth, even to the market-place,
> And waving our red weapons o'er our heads
> Let's all cry, Peace, freedom, and liberty! (III, i, 106-110).

Anthony also, though from a different viewpoint, suggests that Caesar's blood has enriched the swords of the conspirators:

> nor no instruments
> Of half the worth as those your swords made rich
> With the most noble blood of all this world (III, i, 154-56).

The idea of blood as a tincture is not unique to this play. In alchemy, blood is used as a metaphor for the transmutting agent through several associations. First of all, its color is associated with the last stage of the work. The progression of color changes

was an important aspect in alchemy, and the process generally moved from black to white to a rainbow of colors (the peacock's tail) to the final red stage (sometimes called the Red Lion).[1] Secondly, blood was associated with the religious motives of alchemy; Christ's blood was the ultimate tincture, the source of regeneration. It was also connected with a long tradition of myth in which bloody sacrifice and destruction provided the "dew" which would generate new life. Blood (hopefully used metaphorically) also appeared in alchemical texts as a part of the cleansing and purifying process; materials were "washed" so to speak in the purifying blood. In this sense, blood is the liquid principle; it is mercury as opposed to sulphur, water as opposed to fire. In the alchemical parables that deal with dismemberment, two colors are emphasized--the red of the blood, and the white of the bones. These must be somehow reunited in order to progress to the "golden" stage, again the emphasis on unification of contraries. Another confusion is introduced when one finds that blood is also sometimes used to indicate the prima materia. One might be instructed, for instance, to begin the process with menstrum. For the alchemists, of course, the prima materia was also in a sense the ultima materia, purified and refined in the process. One firmly believes from an examination of this one word what was suggested earlier; the alchemists might have many different names for one thing, and also might use one name to represent

[1] Arthur John Hopkins, Alchemy, Child of Greek Philosophy (New York: AMS Press, 1967) in his "color theory" suggests that the progression of color changes is the key to the development of alchemy and its experimentations.

a multitude of meanings.

Shakespeare adopts the general idea that blood may be seen as a kind of tincture. The imagery of the fountain and the washing in blood suggests that blood is a rejuvenating force. Perhaps the emphasis on fire early in the play and the later "bath" of blood indicates the fire and water opposition. Most important, at any rate, is the use of an alchemical metaphor, not to change the history of the play, but to extend its meaning and awaken multiple associations. The heavy emphasis on blood in the play takes on additional significance when it is associated with familiar alchemical ideas about the process of restoration. It also adds a dimension to Brutus' character which is difficult to understand without such reference.

Shakespeare uses this same idea in other places. In King John, for instance, the soldiers, "Their armours, that marched hence so silver-bright,/Hither return all gilt with Frenchmen's blood," (II, ii, 315-16). The imagery is incidental here, but the "golden" quality of blood is much more significant in Macbeth. Critics have long puzzled over Duncan's "golden blood." Reference to alchemical concepts help to clarify that imagery.

MACBETH: BLOOD AS TINCTURE

W. A. Murray, who questions, "Why Was Duncan's Blood Golden?" finds his answer in the imagery associated with alchemy. He concludes: "after the murder . . . the audience would instantly take the point that Duncan's blood has become an alchemical tincture, an enormously strong colouring agent made of perfected matter,

which has the power of transmuting substances, a notion almost commonplace to them."[1] Murray begins his development toward this conclusion with a search for an associative matrix broad enough and rich enough to include the primary image patterns in the play:

> It must be one which will bring in as many as possible of the main images of the play. It must be one demonstrably topical for an audience of 1606, demonstrably accessible and familiar to Shakespeare and rich enough linguistically and conceptually to supply him with material for his poetry. The common consensus of critics gives us the main elements which our matrix should combine. From Dowden we may take the 'zymotic poison of sin', the disease of the fallen world, and the imagery of blood. From Monsignor Kolbe we may take imagery of blood, sleep, and the concept of chaos: from Caroline Spurgeon the imagery of sin as a disease, and the imagery of the human body. The common knowledge we all have of the play will suggest the spirits, witches, and ghosts, the rituals of witchcraft, and necromancy, and Bucknill will remind us of the actual references to medicine.[2]

He determines that there is only one matrix which could include all these elements, and that is the body of thought associated with Paracelsus. Murray goes on to point out numerous associations between the images of the play and the alchemical-medical theories of Paracelsus: the witches are described in terms easily identified with Paracelsus' theory of the spirit nature; the references to Hell are similar to Paracelsus' descriptions; the "Fall" of Macbeth and Lady Macbeth (Adam and Eve) is conceived in terms of the alchemical conception of male-female principles; sleep is identified with Paracelsus' general balsam of nature; the concept of chaos is remarkly close to the Paracelsian conception; and the "medical" speeches imply Paracelsian purgation rather than Galenic

[1] Murray, Shakespeare Survey, 19 (1966) 41.

[2] Ibid., p. 36.

correction of balance.[1] Murray also compares the imagery of this play to several of Donne's poems written at approximately the same time and employing similar Paracelsian alchemical images. Murray prepares a strong case for a very pervasive alchemical influence in this play.

To return, however, to Duncan's golden blood, it would be helpful to examine how the idea of tincture is suggested and prepared for even before Macbeth's vivid speech. Duncan is the good king. He is the source of life and growth for his kingdom. He says to Macbeth, "I have begun to plant thee, and will labour/To make thee full of growing" (I, iv, 28-29). When Duncan's blood is "wasted," it is a "fruitless" crown and a "barren" sceptre that Macbeth gains (III, i, 61-2). Macbeth recognizes the value of Duncan's influence, and speaks of his favours in terms of a shiny, golden quality:

> He hath honour'd me of late, and I have bought
> Golden opinions from all sorts of people,
> Which would be worn now in their newest gloss (II, i, 32-34).

He also realizes that Duncan's murder will cause a universal disturbance. The macrocosm in all its elements, earth, air, fire, and water, will reflect the eruption in the state:

> And pity, like a naked new-born babe,
> Striding the blast, or heaven's cherubim hors'd
> Upon the sightless couriers of the air,
> Shall blow the horrid deed in every eye
> That tears shall drown the wind (III, i, 16-25).

[1]Murray, pp. 37-42.

In this passage, Macbeth assumes a mysterious, natural power which will expose him. It is beyond man; he is not here thinking of being discovered by the reasoning or actions of men. It is not specifically a religious power, but rather it implies the unity of all matter and the inevitable reaction in the macrocosm to the imbalances or disruptions of the microcosm.

That Duncan's blood has a strong tincturing power is evident immediately after the murder. Lady Macbeth says that she will "gild the faces of the grooms" (II, ii, 55-6) with Duncan's blood, suggesting its "golden" qualities. Macbeth supposes that the blood is so potent it could change even the oceans to its color; it has enormous powers of projecting its influence onto other substances:

> Will all great Neptune's ocean wash this blood
> Clean from my hand? No, this my hand will rather
> The multitudinous seas incarnadine
> Making the green one red (II, ii, 60-63).

One is reminded of the grand claim of an alchemist using the name of Raymond Lully. He claimed his perfected matter to be so infinite in purity that it could transmute or tincture unimaginable quantities of base matter: "Mare tingerem, si mercurius esset!--I would tinge the sea [into gold], if it were quicksilver!"[1] The power of Duncan's blood is also emphasized by repeated references to its quantity; it has the powers of multiplication. Lady Macbeth cries, "Yet who would have thought the old man to have so

[1]Cited in Read, The Alchemist in Life, Literature, and Art (London: Thomas Nelson Sons, 1947), p. 7.

much blood in him" (V, i, 44-5). Macbeth, again envisioning the sea of blood, says,

> I am in blood
> Stepp'd in so far that, should I wade no more
> Returning were as tedious as go o'er (III, iv, 136-38).

The most vivid expression of blood as tincture is, of course, Macbeth's speech on the discovery of Duncan's body. Even MacDuff's statement, before Macbeth begins, suggests that Duncan's blood is a transforming agent: "approach the chamber, and destroy your sight/With a new Gorgon" (II, iii, 76-77). Macbeth picks up that association and envisions, just as he saw the dagger before his eyes, the body of Duncan. "Here lies Duncan," he says, not there, but before his very eyes, and the image shines and glows like perfected matter:

> His silver skin lac'd with his golden blood
> And his gash'd stabs looked like a breach in nature
> For ruin's wasteful entrance (II, iii, 117-20).

Macbeth realizes more than he would like to know. The breach of nature, the ruin, the waste, it is the Fall of Man repeated again in his own and his kingdom's story. From this point on, all is disease and chaos and darkness. A purgation must be endured to restore the health of the kingdom.

The references to "cures" for the diseases in this play are interesting, because, as Murray suggests, they strongly emphasize the processes of purgation and purification. They are violent cures, suggesting the Paracelsian idea of like curing like, rather than the Galenic idea of balancing and curing with an opposite

substance. Violence will be applied against violence. The blood of the soldiers will be the "dew" which will cure the loss of Duncan's blood:

> Meet we the medicine of the sickly weal,
> And with him pour we in our country's purge
> Each drop of us.
> Or so much as it needs
> To dew the sovereign flower and drown the weeds (V, ii, 27-30).

It is the Paracelsian over-plus, the idea that repeated applications of a like substance will cause the patient to surfeit, to "vomit" up the sickness and throw off its influence. Macbeth himself suggests a purgating process. He asks,

> If thou couldst, doctor, cast
> The water of my land, find her disease
> And purge it to a sound and pristine health,
> I would applaud thee to the very echo
> That should applaud again - Pull't off, I say--
> What rhubarb, [senna], or purgative drug,
> Would scour these English hence? (V, iii, 50-56).

Again there is the idea of a cleansing of the body through elimination of unhealthy ingredients. A violent, or at least uncomfortable, process is implied. The process of purgation and purification is a painful kind of cure.

In contrast to this rather ugly method of rejuvenation, Shakespeare presents the English king, whose virtue (like Duncan's which is now lost) can give his kingdom health and life as if he were himself the precious elixir. His cures are miraculous and

mysterious. He is the instrument of God.

How he solicits Heaven,
Himself best knows, but strongly-visited people,
All swollen and ulcerous, pitiful to the eye,
The mere despair of surgery, he cures,
Hanging a golden stamp about their necks
Put on with holy prayers (IV, iii, 149-54).

Interestingly, this king, as Malcolm explains, passes his secrets on to an heir before he dies, so that his powers are not lost to the world. While no one else can understand these mysterious powers, their influence continues through his successor. The tradition of the adept and his successor is a very familiar one in alchemy. The secrets of the elixir must be protected from the unworthy, but, at the same time, they must not be lost to the world. Thus, as Thomas Norton explains in his Ordinall of Alchemy,

Also no man could yet this Science reach,
But if God send a Master him to teach;
For it is so wonderful and so selcouth,
That it must needes be tought from mouth to mouth:
. . . . . .
See that noe man shall leave this Arte behinde
But he an able and approved Man can finde;
When Age shall greeve him to ride or goe,
One he may teach, but then never no moe.
For this Science must ever secret be
The Cause whereof is this as ye may see;
If one evill man had hereof all he will

All Christian Peace he might hastilie spill,
And with his Pride he might pull downe
Rightfull Kings and Princes of renowne.[1]

Norton certainly anticipated characters like Macbeth who could destroy the "healing benediction" of a good king. The appearance of the English king in the play has always seemed a little unusual and not particularly related to the rest of the play. It has been taken as an inserted compliment to royalty. If one looks at it, however, through the lens of alchemy, the scene provides a rather direct and pertinent contrast to the catastrophe initiated by the spilling of Duncan's golden blood.

KING LEAR: THE BALM OF NATURE

In King Lear, as in Julius Caesar and Macbeth, a great upheaval occurs in both the microcosm and the macrocosm. Lear, like Macbeth, assumes the natural unity and interaction of all matter. He calls upon the elements to reflect the storm within his own body and soul:

Blow, winds, and crack your cheeks! Rage! Blow!
You cataracts and hurricanes, spout
Till you have drench'd our steeples, drown'd the cocks!
You sulph'rous and thought-executing fires,
Vaunt-courriers of oak-cleaving thunderbolts,
Singe my white head! And thou, all-shaking thunder,
Strike flat the thick rotundity o' th' world!

[1]In Theatrum Chemicum Britannicum, Alias Ashmole, comp. (1652; rpt. New York: Johnson Reprint Corp., 1967), p. 14.

Crack nature's moulds, all germens spill at once
That makes ingrateful man! (III, ii, 1-9).

The images are violent, excessive, explosive. Lear's world, like a giant limbeck in which the ingredients have become unbalanced and destructive, is about to explode, cracking the vessel and spilling out the corrupted materials. It is a world like that of John Donne's "First Anniversary,"

crumbled out again to his atomies.
Tis all in pieces, all coherence gone:
All just supply and all relation.[1]

Both worlds, similarly, have reached their present condition because of a loss. A vital "tincturing" ingredient is missing from each. In Donne's "First Anniversary" the missing elixir is the "she",

in whom virtue was so much refin'd.
That for alloy unto so pure a mind
She took the weaker sex; she that could drive
The poisonous tincture, and the stain of Eve,
Out of her thoughts, and deeds, and purify
All, by a true religious alchemy (177-82).

In Lear's world, it is Cordelia, "the balm of your age" (I, i, 218), as France calls her, that has been lost to Lear. His disintegration, and that of the world around him, begins when he "casts off" the one part of himself which is most pure and life preserving, his daughter Cordelia.

[1] The Selected Poetry of Donne, ed. Marius Bewley. (New York: New American Library, 1966), p. 211. Subsequent references to Donne's poetry are to this edition.

There are striking parallels between Donne's poem and Shakespeare's play, both in mood and imagery. King Lear predates the anniversary poems by about five years, but there are such noticeable similarities in the works that they might be profitably compared. Both picture a world in the process of disintegration. Astrological disturbances join with man's own actions in evidencing this decay. Kent says, "love cools, friendship falls off, brothers divide, in cities mutunies, in countries, discord, in palaces, treason and the bond crack'd twixt son and father" (I, ii, 116-18). Donne writes, in a similar vein,

> Prince, subject, father, son, are things forgot,
> For every man alone thinks he hath got
> To be a Phoenix (215-17).

Edmund exemplifies exactly the kind of individualistic philosophy which Donne is speaking of. With all "just proportion" gone, man is utterly and completely exposed to the dangers both within and without. He is vulnerable to all the evils of a fallen world. Donne states, "when thou know'st this/Thou know's how poor a trifling thing man is" (183-84). Lear discovers exactly the same thing in a process of "casting off" and exposing himself to nakedness:

> Unaccomodated man is no more but
> Such a poor, bare, forked animal as thou art. Off,
> Off, you lendings! Come, unbutton here (III, iv, 111-14).

In both cases, there is the suggestion that man must have something beyond his barest needs in order to be fully human. Lear says, "Allow not nature more than nature needs,/ Man's life is

cheap as beast's" (II, iv, 269-70). Donne writes, "Be more than man, or thou'rt less than an ant" (190). In both works, also the essential ingredient which redeems man from his beastly frailty is missing. In the "First Anniversary" that ingredient, alchemical in nature, is exemplified by the "she" who is the subject of the poem:[1]

> She, she is dead; she's dead: when thou knowest this,
> Thou know's how lame a cripple this world is (237-38).

In Lear, the same kind of sentiment is expressed in Lear's unspeakable horror at Cordelia's death:

> Thou'lt come no more,
> Never, never, never, never, never! (V, iii, 307-8).

For Lear, personally, restoration is not possible once Cordelia is irretrievably lost. She stands in relation to him as the "she" of the "First Anniversary" stands in relation to the world:

> Sick world, yea, dead, yea, putrefied, since she
> Thy intrinsic balm, and thy preservative
> Can never be renew'd, thou never live (56-58).

Lear, without the protection of the life-preserving, regenerating influence exemplified in Cordelia, "the balm of your age", cannot live.

One must now turn, once again, to Paracelsus for an explanation of this peculiar notion of "balm" and an indication of how it

[1]The ostensible subject of Donne's anniversary poems is Mistress Elizabeth Drury. However, Donne handles his subject with such broad application that critics have postulated other identities. Some think that "she" might indicate Queen Elizabeth, while others identify "she" with a purified religion. In any case, the subject becomes more than a specific person in the poem; "she" incorporates all the tincturing, life-preserving forces.

represents preserving, healing, forces. Paracelsus assumed a kind of natural balm or balsam which preserved life; it was, in fact, the essence of life: "The life, then, of all men is none other than a certain astral balsam, a balsamic impression, a celestial fire, an included air, and a spirit of salt which tinges."[1] All man had this protective natural medicine, but it could be destroyed, thereby exposing man to the "poisons" of the world. The poisons were literally everywhere: "understand, moreover, after the following manner, how, in every single thing which man takes for his use there is a poison hidden under what is good."[2] With the life-preserving balsam, the poison was, in effect, separated from the good, and man's health was stable. Without it, however, he was subject, both spiritually and mentally (as Paracelsus always assumes both spiritual and mental disease) to all the sicknesses of the world. In other words, man's whole being was constantly involved in a kind of alchemical process. The balm of nature was the essential ingredient which allowed man to survive; it was the separating, purifying, restorative agent. It is linked in this sense to the idea of tincture, the operation of virtue, the elixir of life. Donne uses his female subject to represent this idea in his poem, although the loss is really a general, universal one, not limited to one figure. Donne's whole world lacks what Paracelsus called a vis (a force) and a potentia (power) which can renew and regenerate life.

[1]Paracelsus, Hermetic and Alchemical Writings of Paracelsus, trans. Arthur Edward Waite, II (New Hyde Park, New York: University Books, 1967), p. 136.

[2]Ibid., p. 241.

The world of King Lear is also permeated with a sense of loss and despair and vulnerability. The possibility of restoration is represented in Cordelia, but she, too, is finally lost. She is described as a potential "cure" for her father's sickness:

> O my dear father! Restoration hang
> Thy medicine on my lips and let this kiss
> Repair the violent harm that my two sisters
> Have in thy reverence made (IV, vii, 26-29).

She is the daughter "who redeems Nature from the general curse" (IV, vi, 210). She is a "soul in bliss" (IV, vii, 45). Her tears, "As pearls from diamonds dropp'd" (IV, iii, 24). They are holy--life preserving: "There she shook/The holy water from her heavenly eyes," (IV, iii, 31-32). It is Cordelia alone that can provide the life preserving fluid which will douse the wheel of fire that Lear is bound to. She pleads that the strength of that balm be in her tears:

> All blest secrets,
> All you unpublish'd virtues of the earth,
> Spring with my tears! be aidant and remediate
> In this good man's distress! (IV, iv, 15-18).

The "blest secrets" and "unpublish'd virtues" which Cordelia calls upon seem to remain hidden in this play. It is the darkest of Shakespeare's tragedies. Only in escaping this world does Lear see the possibility of transformation, and once again, that possibility depends on Cordelia. Donne wrote, "And that thou hast but one way, not to admit/The world's infection, to be none of it" (245-46). Lear also desires this kind of escape; he would lose

himself in Cordelia. Donne made a rather extravagant statement about his subject in the "Second Anniversary", one which again demonstrates parallels with Lear:

> She, whose fair body no such prison was,
> But that a soul might well be pleas'd to pass
> An age in her (221-23).

Certainly there are sexual connotations, but also the suggestion of immortality through the life preserving influence of this elixir. The same kind of suggestiveness is present in Lear's lines when he and Cordelia are led away to prison:

> Come, let's away to prison.
> We two alone will sing like birds in the cage
> . . . . . .
> And take upon's the mystery of things
> As if we were God's spies, and we'll wear out,
> In a walled prison, packs and sects of great ones
> That ebb and flow by the moon (V, iii, 8-9, 16-19).

Cordelia, because she is life preserving, can take Lear beyond time, beyond the poisons of his world. Without her, however, everything, as Lear says, "smells of mortality" (IV, iv, 136).

In the three plays thus far discussed, Shakespeare uses the associations of alchemy with the priestly function or the "curative" function of the physician. He uses alchemy as a <u>metaphor</u> to express certain kinds of characteristics and processes. In each of the plays, there is a central figure who is <u>like</u> an alchemist or like the perfected material (in esoteric alchemy, the operator and the material are essentially the same). This character is

capable of tincturing or curing. An analogy is drawn between the operation of virtue and the operation of the elixir. This idea seems strange to modern readers, because our world is no longer unified; there is no apparent connection between the virtues of man and the perfection of matter. In the renaissance world, however, "the seemingly mysterious acquisition of virtue in a human being, and the mysterious perfection brought about in the sick body or base metal, were believed to be similar phenomena from a philosophical point of view."[1] The whole process of alchemy was also commonly used as a metaphor. Any agent might be an alchemist in a certain sense. Paracelsus wrote, "This method of perfection is called Alchemy. For the alchemist is a baker, in that he bakes bread, a wine merchant, seeing that he prepares wine; a weaver, because he produces cloths. So, whatever is poured forth from the bosom of Nature, he who adapts it to that purpose for which it is destined is an alchemist."[2] Or, in another sense, a specific agent was not even necessary. The process of alchemy, by analogy, worked on all different levels: in the universe, in the state, in man, in the organs of man. T. P. Sherlock summarizes Paracelsus' views about this extended nature of alchemy:

> The same influence makes him view Nature, in her operations that bring about life, death, sickness, and health, as a kind of "world-alchemist", man in his function of preparer of remedies becomes the alchemist of nature,

[1] Joseph A. Mazzeo, "Notes on John Donne's Alchemical Imagery", Isis, 48 (1957), p. 116.

[2] Hermetic and Alchemical Writings, p. 148.

> while within man dwells a further "archeus" or alchemist who works in the stomach, which is, as it were, his laboratory.[1]

Shakespeare, taking this extended Paracelsian view of alchemy, can utilize its imagery to suggest all the wonders of change and conflict and process and rejuvenation.

ALCHEMICAL IMAGERY: SELECTED REFERENCES

Shakespeare employs alchemical imagery in many of his plays, sometimes almost incidentally, and sometimes more significantly. In any case, the association of a certain character with alchemical imagery helps to establish the identity of that character in reference either to his "baseness" or his "perfection." A few examples are here presented. In Henry V, King Henry suggests that Lord Scroop might have been a kind of alchemist:

> Thou knew'st the very bottom of my soul
> That almost could have coined me into gold,
> Wouldst thou have practis'd on me for thy use (II, ii, 97-99).

His falseness and his trickery, however, have tainted all around him:

> And thus thy fall hath left a kind of blot
> To mark the full-fraught man and best indued
> With some suspicion (II, ii, 139-140).

His fall is like Adam's fall, "For this revolt of thine, methinks, is like,/Another fall of man" (II, ii, 141-2). It changes Scroop's

[1]Cited in E. J. Holmyard, Alchemy (1957; rpt. Baltimore: Penguin Books, 1968), p. 171.

influence from the potential tincture of perfected matter to the corrupting taint of baseness. In contrast, Henry, as the good king, retains a power to transform. He can "infect" others with his virtues:

A largess universal like the sun
His liberal eye doth give to everyone,
Thawing cold fear, that mean and gentle all
Behold, as may unworthiness define
A little touch of Harry in the night (IV, Prologue, 143-47).

And he can, like the alchemist, separate the good from the poisons of the world, and use that purified matter for the health of his kingdom:

There is some soul of goodness in things evil
Would men observingly distil it out;
. . . . . .
Thus may we gather honey from the weed
And make a moral of the devil himself! (IV, i, 4-5, 11-12).

Percy, in Henry IV, 2, is pictured similarly as a tincturing influence on his men. His "metal" transforms the quality of their substance; without it they are lead:

In few, his death, whose spirit lent a fire
Even to the dullest peasant in the camp,
Being bruited once, took fire and heart away
From the best-tempered courage in his troops.
For from his metal was his party steel'd;
Which once in him abated, all the rest
Turn'd on themselves, like dull and heavy lead (I, i, 112-18).

In addition to specific characters who seem to have the power of tincture, Shakespeare also uses the metaphor of alchemy to express natural processes. The sun, for instance, is the alchemist in this passage from King John:

> To solemnize this day the glorious sun
> Stays in his course and plays the alchemist,
> Turning with splendor of his precious eye
> The meagre cloddy earth to glittering gold (III, i, 77-80).

A similar identification of the sun with the processes of alchemy is found in "Sonnet 33":

> Full many a glorious morning have I seen
> Flatter the mountain tops with sovereign eye,
> Kissing with golden face the meadows green,
> Gilding pale streams with heavenly alchemy.

There is the suggestion in this sonnet that the sun might be compared to the favor of a person the poet loves, capable of transforming his world or of tainting it with darkness. The passage from King John also associates alchemy with the processes of love, for the occasion on which the sun "plays the alchemist" is the wedding of Blanch and Lewis. A similar kind of comparison between love and alchemy is found in "Sonnet 114", where Shakespeare hints that one must take care that love's transforming power is not false alchemy:

> Or whether doth my mind, being crown'd with you,
> Drink up the monarch's plague, this flattery?
> Or whether shall I say mine eye saith true
> And that your love taught it this alchemy,

To make of monsters and things indigest
Such cherubims as your sweet self resemble
Creating every bad a perfect best.

The golden crown of a king is similarly discussed by Prince Henry in Henry IV, 2, as a poor substitute for the true product of alchemy, the elixir of life. As he contemplates his father's crown, the Prince thinks,

The care on thee depending
Hath fed upon the body of my father;
Therefore, thou best of gold art worst of gold.
Other, less fine in carat, is more precious,
Preserving life in medicine portable (IV, v, 159-63).

Henry refers specifically to aurum portable or portable gold, a product of the Paracelsian physician-alchemists. This medicine, one recalls, was the subject of a great deal of controversy; its prescription was the basis for fines and imprisonment of Paracelsian physicians. There are numerous other indications that Shakespeare is very familiar with the medical theories of Paracelsus. The use of the Paracelsian overplus has been noted in Macbeth, and Shakespeare's characters often advance the idea that "like cures like." Pandolph, for instance, in King John says,

The better act of purposes mistook
Is to mistake again; though indirect,
Yet indirection thereby grows direct,
And falsehood falsehood cures, as fire cures fire
Within the scorched veins of one new-burned (III, i, 274-78).

The Galenic physicians emphasized balance; thus, in order to cure, they would administer an opposite influence. The Paracelsians did not reject the idea of balance, but they relied strongly on the process of purgation. Thus, in order to eliminate one "poison" they might very well prescribe another "poison" until the patient surfeited. Northumberland, (Henry IV, 2) is speaking in this vein when he says,

> In poison there is physic; and these news,
> Having been well, that would have made me sick
> Being sick, have in some measure made me well
> And as the wretch whose fever-weak'ned joints,
> Like strengthless hinges, buckle under life,
> Impatient of his fit, breaks like a fire
> Out of his keeper's arms, even so my limbs
> Weak'ned with grief, being new enrag'd with grief,
> Are thrice themselves (I, i, 137-45).

In this passage, and in others which emphasize the idea of surfeit, Shakespeare assumes a kind of natural process which leads to restoration. While surfeiting is evidence of sickness, of imbalance, it also is potentially curative. One sees the basically beneficent forces of the universe--forces which are almost chemical in nature--which, although they involve much pain and struggle, lead in the end to renewed health. In many of Shakespeare's plays this sense of a natural, almost inevitable, process which leads to restoration is present. Even in Lear and Timon, which suggest a shattered universal frame, there is final restoration and rejuvenation. This attitude is not specifically religious; rather it sug-

gests a world view, like that of the alchemists, which embraces the process of change and assumes a basic optimism, even while recognizing man's vulnerability to disease and corruption.

The vulnerability of alchemical ideas to man's perversion is most evident in Timon. One would expect, in a play so much concerned with gold, that the imagery of alchemy might be present. It is used, in this instance, with a much more satirical tone. Timon, like the material alchemist, can change all into gold: "If I want gold, steal but a beggar's dog/and give it Timon; why the dog coins gold" (II, i, 5-6). Timon does not, however, transform the character of the men around him, "My Lord, they/Have all been touch'd and found base metal" (III, iii, 5-6), nor does he heal the disease of his world. The disease is, in fact, greed, and men hover around Timon, not because of his virtue, but because they can use him for their own profit:

> He pours it out: Plutus, the god of gold
> Is but his steward. No need but he repays
> Sevenfold above itself: no gift to him
> But breeds the giver a return exceeding
> All use of quittance (IV, i, 287-91).

Gold, in this case, becomes the corrupting rather than the purifying substance. It is the "world's most operant poison!" (IV,iii,25). Timon now gives away the buried gold to "Do thy right nature" (IV,iii,44). in other words, to further corrupt and infect men. He bitterly and cynically says to the poet, "You are an alchemist; make gold of that! (V, i, 117). Timon expresses a common view of alchemy as a cover for scoundrels and charlatans.

From this point of view, alchemy appeals only to man's baser instincts: "What a god's gold/That he is worshipped in a baser temple/Than where swine feed?" (IV, i, 51). Timon sneers at the idea of transformation and rejuvenation:

> Thus much of this will make black white, four fair,
> Wrong right, base noble, old young, coward valiant (IV,iii,28-9).

Curiously enough, however, the play ends in a restoration which is stated in similar terms:

> Make war breed peace, make peace stint war, make each
> Presume to other as each other's leech (V, iv, 83-4).

In all of the above examples, there are implied comparisons; the imagery of alchemy is used metaphorically to suggest certain kinds of characteristics and processes. There are a few characters in Shakespeare's plays, however, who might actually <u>be</u> alchemists. Primarily, they are seen as healers with mysterious powers and knowledge of nature's secrets. Cerimon, in <u>Pericles</u>, is one such character. He states his identity directly:

> Tis known, I ever
> Have studied physic, through which secret art,
> By turning o'er authorities, I have,
> Together with my practice, made familiar
> To me and to my aid the blest infusions
> That dwells in vegetives, in metals, stones;
> And I can speak of the disturbances
> That Nature works, and of her cures (III, ii, 31-36).

There are several indications that Cerimon is, in the tradition of Paracelsus, a physician-alchemist. First of all, he speaks of

his profession as a "secret art" indicating the mysterious powers of the alchemists. Secondly, he depends on both authority and practice; one's own experience and experiments were constantly emphasized by the Paracelsists in opposition to the "theories" of Galenics. The Galenic physicians were said to be so attached to their metaphysical system that "If a patient ignorantly died under the treatment, the doctor felt perhaps that a stupidly obstinate attitude toward authority had met with its just reward."[1] Moliere satirized this attitude in Love the Best Physician when his doctor Macroton says, "Not that your daughter may dye for all this; but yet you will have done something, and you'll have the consolation that she died according to form" (II, 5).[2] Cerimon also points to remedies extracted from vegetives, metals, and stones. The Galenic physicians used herbal medicines, but, for the most part, did not approve of mineral preparations. The Paracelsists used all three types. Finally, Cerimon acknowledges his debt to Nature. He is Nature's assistant, discovering the "blest infusions" which are her cures. Again, the alchemists constantly emphasized their intimate relationship with Nature. As Paracelsus stated, "The art of prescribing medicine lies in nature, which compounds them herself.[3]

[1]Herbert Silvette, The Doctor on the Stage: Medicine and Medical Men in Seventeenth Century England (Knoxville: University of Tennessee Press, 1967), pp. 7-8).

[2]Cited in Silvette, p. 8.

[3]Paracelsus, Hermetic and Alchemical Writings, p. 90.

Cerimon is also described by others as a very good man, generous, compassionate, almost holy:

> Your honour has through Ephesus pour'd forth
> Your charity, and hundreds call themselves
> Your creatures, who by you have been restor'd
> And not your knowledge, your personal pain but even
> Your purse, still open, hath built Lord Cerimon
> Such strong renown as time shall never [raze] (III, ii, 44-49).

One recalls the idea, presented in numerous alchemical texts, that the true adept must first rid himself of all worldly vices before he can achieve mastery of the Great Work. Cerimon's cure of Thaisa is miraculous, and in part, it is the sanctity of his own character which makes it possible.

The method which Cerimon uses to restore Thaisa to life is not really explained. There are, however, some interesting suggestions about its nature. Cerimon says,

> I heard of an Egyptian
> That nine hours lien dead
> Who was by good appliance recovered (III, ii, 84-6).

The comment about Egypt implies both a connection with the ancient origins of alchemy and a particular substance which Paracelsus called "mumia". He advocated its use as a kind of elixir and associated it with the ancient Egyptian form of preserving the body in mummies. He explains, "Mumia is that which cures all wounds, that is, sweet mercury. . . . Mumia is the liquor diffused through the whole body, the limbs etc., with the strength that is

required."[1] Further evidence that this might be what Shakespeare is suggesting is that Cerimon calls for fire, cloths, and a vial containing some kind of mysterious liquid. Two other aspects of the scene are unusual and might also be connected with alchemy. When the men open the casket, they notice a very sweet, fragrant odor. It is not what one would expect from a casket! Read points out the relationship of smell to the alchemical process: "The production of the Great Work, or Philosopher's Stone was often supposed to be heralded by the advent of a powerful odor."[2] He quotes from Cremer's Testament; "When this happy event takes place, the whole house will be filled with a most wonderful, sweet fragrance."[3] Read also discusses the alchemical belief in the beneficent influence of music;" it is likely that the processes of the Great Work were sometimes performed to the accompaniment of musical chants or incantations."[4] Besides the fire, the cloths, and the vial, Cerimon also emphasizes the music that accompanies Thasia's miraculous restoration.

Another character who might know something of the alchemist's art is Friar Laurence in Romeo and Juliet. He occupies a rather

[1]Paracelsus, Hermetic and Alchemical Writings, p. 169. Further explanation of the concept of "mumia" and its relationship to other terms, such as "Iliaster", "Arcanum", and "Protoplastus", which Paracelsus also uses to express the idea of a universal healing, preserving agent is provided by Henry M. Pachter, Paracelsus: Magic Into Science (New York: Henry Schuman, 1951), pp. 213-217.

[2]Read, Prelude to Chemistry, (New York: Macmillan Company, 1937), p. 246.

[3]Ibid., p. 247.

[4]Ibid.

unusual position in the play. He is not a physician, yet he regularly gathers materials to prepare medicinal remedies. Surely one cannot accuse the holy man of associations with black magic, yet he gives to Juliet a preparation which so effectively simulates death that all are convinced of her demise. He is a Friar, and one has to wonder what other mysteries he dabbles in. Men of holy orders were very often associated with alchemy. One recalls Friar Bacon and Friar Bungay. Frater Basil Valentinus of the Benedictine Order produced The Triumphal Chariot of Antimony and numerous other works. It was from the bishop's tomb at Glatonsbury Abbey that Edward Kelly supposedly obtained the manuscript and the red powder which initiated his well-known adventures with Dr. Dee.[1] There would have been, then, some ready associations for Shakespeare's audience to suggest the nature of the activities the Friar engages in. He himself reveals the kind of thought which permeates his practice:

> The earth, that's nature's mother, is her tomb;
> What is her burying grave, that is her womb;
> And from her womb children of divers kind
> We sucking on her natural bosom find.
> Many for many virtues excellent,
> None but for some, and yet all different.
> O, mickle is the powerful grace that lies

[1]For a full explanation of Kelly's aquisition of the red powder and his subsequent adventures at the court of Rudolph II along with John Dee, see The Alchemical Writings of Edward Kelly, trans. Arthur Edward Wait (1893; rpt. London: Vincent Stuart and John M. Watkins, 1970).

In plants, herbs, stones, and their true qualities,
For nought so vile that on the earth doth live
But to the earth some special good doth give,
Nor aught so good but, strain'd from that fair use,
Revolts from true birth, stumbling on abuse
Virtue itself turns vice, being misapplied,
And vice sometimes by action dignified.
Within the infant rind of this weak flower
Poison hath residence and medicine power (II, iii, 9-22).

Friar Laurence, much more in the tradition of alchemical thought than Christian theology, talks of nature's womb. The alchemists supposed that their process, using a closed vessel and heat and water, simulated the action of the earth's womb. They also believed, as Friar Laurence, that Nature tended toward perfection--none so vile but "some special good doth give." The prima materia was essentially good. However, interference could cause "Revolts from true birth." It was the alchemist's function, therefore, to separate the good from the evil, the poison from the medicine: "within the infant rind of this weak flower/Poison hath residence and medicine power." The alchemists, like Friar Laurence, had an intimate relationship with nature and could not "create" remedies, but only "discover" the hidden virtues which were already there: "We sucking on her natural bosom find." Like the "blest infusions" which Cerimon depends on, Friar Laurence also would see, "the powerful grace that lies/In plants, herbs, stones, and their true qualities." He also does not leave out stones, alchemical preparations, from his list of potential remedies. In addition, the

Friar emphasizes the very foundation of Paracelsian medicine, the macrocosm-microcosm analogy. Just as all matter contains both poison and medicine, so too does man exemplify this same division into contraries, the potential taint or tincture:

> Two such opposed kings encamp them still
> In man as well as herbs, grace and rude will;
> And where the worser is predominant,
> Full soon the canker death eats up the
> plant (IV, iii, 27-30).

If Friar Laurence is not specifically an alchemist, he is certainly influenced by their thought. His imagery is chemical: "like fire and powder,/Which as they kiss consume" (II, v, 10-11). He gives Juliet a "distilled liquor" (IV, i, 94).

Another example of a Shakespearean character who shares certain affinities with the alchemists is Helena, who provides a miraculous cure for the King in All's Well That Ends Well. More accurately, Helena's father is spoken of in terms that can be associated with alchemy. He had a skill which, "had it stretch'd so far, would have made nature immortal, and death should have play for lack of work" (I, i, 22-24). He passed on to his daughter,

> some prescriptions
> Of rare and prov'd effects, such as his reading
> And manifest experience had collected
> For general sovereignty and that he will'd me
> In heedfull'st reservation to bestow them,
> As cures whose faculties inclusive were
> More than they were in note (I, iii, 227-33).

These prescriptions have some remarkable qualities. They are, first of all, of "general sovereignty"--of universal efficacy, not limited to one particular disease or person. They must be used "In heedfull'st reservation," not generally and openly distributed. Helena, must, in a sense, keep these cures a secret, for they are "More than they were in note." They are not publicly understood and recognized. Helena's father has passed on his secrets to Helena just as the alchemists were obligated to find a successor for their knowledge, without writing it down or making it publicly available. The affects of these "rare" medicines have been "prov'd" by reading and "manifest experience", again emphasizing the alchemical reliance on personal experimentation along with theory.

Helena acknowledges that there is some power in this medicine beyond the ordinary skill of man; she suggests the priestly function of the alchemist:

> There's something in't
> More than my father's skill, which was the greatest
> Of his profession, that his good receipt
> Shall for my legacy be sanctified (I, iii,248-50).

In alchemical texts, there is constant repetition of the idea that the alchemist is God's instrument. His art is the art of assisting Nature, God's process of perfection and restoration. Without God, the alchemist is powerless. Helena evidences a similar kind of thinking in the following passage:

> But most it is presumption in us when
> The help of Heaven we count the act of man.

Dear sir, to my endeavours give consent;
Of Heaven not me, make an experiment.
I am not an imposter that proclaim
Myself against the level of mine aim:
But know I think and think I know most sure
My art is not past power nor you past cure (II, i, 154-61).

Helena speaks of her work as an "art" and she assures the king that she is not an "imposter", suggesting the frequent abuse of alchemy by charlatans. She tells the king that it is not her own power, but Heaven's power, which will cure him through her.

The king is hesitant to accept her help, since he has been told by "our most learned doctors" and the "congregated college" that he is beyond cure. He almost certainly refers to the Galenic physicians, since the universities at this time would allow no study of medicine except that based on Galen's theories. The "congregated colleges" in fact, such as the College of Physicians in London and the Medical Faculty of Paris, were very busy at the time this play was written censoring, fining, and even imprisoning those who dared to use the methods or remedies of Paracelsus. The Countess demonstrates the same kind of thinking when she tells Helena that her skills will not be credited, "when the schools,/ Embowell'd of their doctrine, have left off/The danger to itself" (I, iii, 246-48). One can almost imagine that the king is repeating the words of his Galenic physicians who have warned him against alchemical imposters who might promise a miraculous cure. He reiterates their opinion:

That labouring art can never ransom Nature

From her inaidable estate; I say we must not hope,
To prostitute our past-cure malady
To empirics, or to dissever so
Our great self and our credit, to esteem
A senseless help when help past sense we
deem (II, i, 121-27).

He has been duly warned against "empirics" and his first reaction is to turn Helena away. Only when Helena has promised a definite time limit for her cure (the charlatan alchemists were famous for delaying the final results and milking their victims for all they were worth in the meantime) and the forfeiture of her life should she fail, does the king agree to accept her "physic." The cure is speedy and complete, though it is never explained. Helena simply says, "Heaven hath through me restored the King to health" (II, iii, 70).

Helena joins the ranks of those remarkable physicians, magicians, priests in Shakespeare's plays who might be more concisely referred to as alchemists.

ALCHEMY AND MAGIC

Cerimon, Friar Laurence, and Helena, each of whom uses methods which can be linked to Paracelsian medicine and alchemical philosophy, share also in suggesting the possibilities of a beneficent magic operating in the universe. That alchemy should be thus linked and combined with ideas of white magic was almost inevitable. First of all, the alchemists claimed to be spiritual descendents of Hermes Trismegistus, and magic as an intellectual

system received its strongest support from Ficino's translations of the hermetic writings and Pico's commentary based on those translations. John Spenser Mebane points out the frequent use of alchemical imagery and reference in the works of both Ficino and Pico. He calls Pico's magic "a kind of cabalized alchemy."[1] In studying the philosophy of Marsilio Ficino, Mebane notes that, "alchemical language occurs fairly often in Ficino, and he uses it both literally . . . and metaphorically. It is ideally suited to describe the process of ascent toward Godhead which involves both internal action (i.e. reflections) and external action (art)."[2] Again, one realizes the impossibility of drawing clear lines between various intellectual systems and the inevitability of a blending of influences in literary works. The alchemists referred to themselves as hermetic philosophers; much historical comment makes no distinction at all between alchemy and hermeticism. The two systems cross and blend to such an extent that they are scarcely distinguishable, except perhaps in the fact that alchemy provides a specific process for acting out the philosophical concepts.

The alchemists and the white magicians also share a common bond in that both envision their function as a restorative one. Pico stressed the importance of magic as a force which could call forth "into the light as if from their hiding places the powers

[1]John Spenser Mebane, "Art and Magic in Marlowe, Jonson, and Shakespeare: The Occult Tradition in Dr. Faustus, The Alchemist, and The Tempest, D.A.I. 35 (1975), 7316-17 A, p. 53.

[2]Ibid., p. 22.

scattered and sown in the world by the loving kindness of God."[1] This was precisely how the esoteric alchemist thought of his own work, as a process of "discovering" the hidden virtues of all substances. The white magicians and the alchemists were alike in that they mutually represented a most optimistic view of man's potential power to transform himself and his world.

It is this optimistic viewpoint which leads Francis Yates to identify Shakespeare's Prospero with the alchemist and astrologer, John Dee. She calls Prospero the "magus as scientist" and links his magic with the medical magic of Cerimon in Pericles and the "deep Hermetic magic" in The Winter's Tale.[2] Yates emphasizes the reforming, restorative nature of Prospero's magic and associates it with "magic as an intellectual system of the universe, foreshadowing science, magic as a moral and reforming movement, magic as the instrument for uniting opposite religious opinions in a general movement of Hermetic reform."[3] One might almost imagine that she is describing magic as alchemy. A further indication that magic is closely related to alchemy in Yates' discussion is a comparison of The Tempest and The Alchemist.

Yates sees Shakespeare's Tempest as a direct contrast to Jonson's The Alchemist.[4] Both plays were published at about the

[1]Pico della Mirandola, Oration on the Dignity of Man trans. Charles Glenn Wallis (1940; rpt. New York: Bobbs-Merrill Co., 1965), p. 28.

[2]Francis Yates, Shakespeare's Last Plays: A New Approach (London: Routledge & Kegan Paul, 1975), pp. 87-105.

[3]Ibid., p. 87.

[4]Ibid, pp. 109-24.

same time, but while one supports the possibility of transforming power, the other satirically dismisses the whole complex of ideas, including alchemy, which suggests that man may significantly change himself or his world for the better.

In The Tempest, Prospero, like the true alchemist, transforms and restores his world, while in The Alchemist, Subtle, as the charlatan alchemist, uses his powers only to manipulate those around him. Yates believes that both plays are focused on John Dee. Dee, in Elizabeth's reign, had considerable influence and promoted visions of a new world (somewhat in the style of Bacon's alchemical dreams for England in Friar Bacon and Friar Bungay). Dee, however, had fallen into disfavor after his exploits with Kelly at the alchemists' court of Rudolph II. James did not approve of the effervescent Dee. Thus, Yates looks at The Tempest and The Alchemist as contrasting views of Dee and the ideas with which he was associated. She concludes that a comparison of the two plays "establishes what before could only be conjectured, that Shakespeare in consciously defending Dee and his reputation."[1]

David Woodman also suggests that Dee might be the subject on which Prospero is modeled.[2] He points out that Prospero, in the tradition of the alchemists, burns his books. Prospero carries a staff, perhaps the staff with the entwined serpents of Hermes, a familiar symbol in alchemical iconography. He is also very con-

[1]Yates, p. 119. Yates suggests that all her studies have led her toward Shakespeare. She promises a study on "Shakespeare and the Hermetic Tradition", p. 3.

[2]David Woodman, White Magic and English Renaissance Drama (Rutherford: Fairleigh Dickinson University Press, 1973), p. 33.

cerned with "timing" based on astrological influences, an important consideration in the alchemical process:

> I find my zenith doth depend upon
> A most auspicious star, whose influence
> If now I count not but omit, my fortunes
> Will ever after droop (I, ii, 181-84).

John Mebane concurs with Yates that The Tempest demonstrates a particular kind of attitude toward the possibilities of transformation. He suggests that "Shakespeare may well have been playing upon the alchemical meaning of the world 'tempest'; it is a boiling process which removes impurities from base metal and facilitates its transmutation into gold."[1] Certainly the characters in the play are subjected to a process of purgation and purification, brought about by the force of Prospero's magic. Those who respond positively to this force are renewed and transformed. Some of the characters, of course, such as Caliban, Stephano, and Trinculo, can only be "gilded", not transmuted to gold: "Where should they/Find this grand liquor that hath gilded 'em" (V, i, 279-80). The alchemist would explain that material must be brought up to a certain level before it can be acted upon; it must be "ripe." The baseness of these characters is enough to defy even Prospero's transforming powers.

The Tempest, the last of Shakespeare's plays, confirms what is suggested in earlier works, that Shakespeare continuously recognizes man's potentiality for transformation and growth. Whether that possibility is seen in the purging sacrifice of a

[1]Mebane, p. 177.

Caesar, the tincturing blood of Duncan, the balm of Cordelia, the mysterious healing of the alchemist-physicians, or in the magic of Prospero, it is expressed in part through the imagery and associations of the alchemical process. That process, like Shakespeare's plays, gives full recognition to both the inevitable struggle and the potential regeneration implicit in the life of man.

Chapter 3

ALLUSIONS AND REFERENCES TO ALCHEMY IN SHAKESPEARE'S HAMLET

Alchemy--even now the word retains a quality of mystery and drama. Even now it brings to mind the endless struggles of man; his continual seeking and overreaching, his optimism and his cynical pessimism, his potential for good and his vulnerability to perversion and illusion. With only a little exposure, its rich metaphors creep into one's language, tainting and tincturing and multiplying. The world becomes process and the magnum opus goes on. In the twentieth century, alchemy finds its ways into plays and novels and poetry, its still potent imagery exposing the hidden processes of love, of creativity, of self-realization. Perhaps nowhere, however, is the alchemical process more dramatically and potently utilized than in William Shakespeare's Hamlet.

This play, both in theme and structure, evidences the rich possibilities of alchemical reference and imagery. The main character of the play (whose true nature is still being discussed and debated) is involved in some kind of inner struggle which, after much suffering and the passage of time, is eventually rather mysteriously resolved. The macrocosm and the microcosm are intimately connected; Hamlet's world suffers as he does. In eloquent soliloquies, Hamlet reveals his inner struggles, employing some unusual terminology which has encouraged a great variety of interpretation. The play moves towards its resolution almost

by a force of its own; one has difficulty assigning movement to any particular agent or event. There is a rather veiled sense of religious development in the play. There is obvious emphasis on a psychological struggle. Hamlet has some of the characteristic qualities of an initiate, who must give up the innocence of his youth and endure a testing process in order to fulfill the roles of his maturity. All this, plus the language and imagery of the play, suggests the connection between Hamlet and alchemy.

WORD DISTRIBUTION IN HAMLET

A look at a Shakespearean concordance alone indicates a definite kind of tone and process in this play. Although, assuredly, many alchemical terms were absorbed in the general language, the great number of words in Hamlet which can be identified with the alchemical process encourages the supposition that Shakespeare may have intended to awaken certain associations. Although there is no visible fire in Hamlet, there is a great deal of heat. Words that refer to heat (such as hot, fire, blaze, flame) are used at forty-two different points in the play.[1] There are eight references to purity or purification, and the words wholesome and whole are used a total of fourteen times. In contrast, there is repeated emphasis on different forms of imperfection; eight references to baseness, nine referring to beastliness, and fifteen other uses (like flaw, fault, defect) which indicate the less than perfect, the unfulfilled potential. The process of decay is suggested at

[1]Marvin Spevak, A Shakespeare Concordance, Tragedies (Germany: Georg Loms, 1968), pp. 751-891. Subsequent reference to word distribution are based on this concordance.

twelve different points. There are maggots and compost and excrements in the play.

Such usage is not typical word distribution for Shakespeare. Neither is it typical for him to rely much on imagery associated with metals or minerals. Yet in Hamlet, one finds mercury (1), quicksilver (1), sulphous (1), salt (3), silver (1), golden (3), gilded (1), mineral (1), element (1), clay (1), ore (1), and metal-s (2). Shakespeare's use of verb forms in this play might also be associated with activities familiar to the alchemists: tinct (1), taints (1), transform (1), converted (3), concealed (1), cure (1), dye (1), puff'd (2), distilled (1), distillment (1), change-ed (4), break (8), cleave (1), and melt (2).

Like the materials confined in the hermetic vessel, the characters in this play continually refer to a sense of being closed in, unable to escape. Words which indicate some kind of confinement or imprisonment are used a total of twenty times in the play and include prison (5), prisoner (2), prison house (1), confin'd (1), confine (2), bound (5), bounded (1), bounds (1), enseamed (1), fetters (1). This would not, perhaps, be unusual if one were reading a different story, but just as there is no visible fire in Hamlet, there is also no observable prison. The heavy emphasis on fire, purification, change, decay, metallic substances, and imprisonment must, in some sense, be understood metaphorically. The one metaphor which ties them all together is alchemy.

Finally, there is a rather peculiar group of words which seem to have no apparent connection with each other or even with the play except that each of these items may be found pictured quite

prominantly in the art associated with alchemy. Each is an alchemical symbol. The chameleon represents the changing colors of the process, the cherub indicates the after-work when the work becomes "child's play," the crocodile is another representation of the dragon, the pelican is both the vessel and the bird which devours itself, the egg-shell figures as the philosophic-egg, and the wheel is a pictorial representation of the process. Along with these, there are several figures from myth which appear in Hamlet, and these figures also may be connected with alchemy. Hercules is most prominent; he is alluded to at four different places in the play. He is also a favorite of the alchemists, and this connection will be discussed in greater detail below. Vulcan is mentioned as is Hecate; these two are often associated with the blacker "magic" aspects of alchemy. The mythological figures in combination with the many other words which can be identified with alchemy indicate a particular frame of reference--the world of the alchemical process.

SOME STRANGE ERUPTION

Keeping in mind that in general Shakespeare's choice of words is rather unusual in this play, one must examine how the words are used in context and what they contribute to the development of the play. In the first scene of Act I, the audience is immediately made aware that there is, as Horatio puts it, "some strange eruption" (I, i, 69)[1] in the state. The phrase suggests a kind

[1]References for Shakespeare's plays are to The Complete Plays and Poems of William Shakespeare, eds. William Allan Neilson and Charles Jarvis Hill, New Cambridge Edition (Cambridge, Massachusetts: Houghton Mifflin, 1942).

of chemical imbalance, a potentially explosive and mysterious process taking place. The ingredients which contribute to that "eruption" are several. First of all, an apparition has appeared to the men on night guard, an event which many, along with Horatio, "might not this believe/Without the sensible and true avouch/Of mine own eyes" (I, i, 56-58). Secondly, there is an unusual amount of activity going on in the kingdom, activity which is not interrupted either by nightfall or by Sunday. The work is continuous; it makes "the night joint-labourer with the day" (I, i, 78) and is carried on in "sweaty haste" (I, i, 77). The normal rhythms of life--sleep, a day of rest--must not interfere with its progression. The description of this activity bears striking affinities with descriptions of alchemical laboratories, the forced labor, the sweat, the necessity of uninterrupted toil, and it also initiates a sense of process, of activity directed toward some end which is not entirely clear. The "subject of the land," "the shipwrights" are involved in the activity, but do not seem to know the purpose of their "sore task." Actually, there is a logical explanation for what is going on, which Horatio soon furnishes, but still the passage retains a quality of mysteriousness, both by the way it is stated and by its placement immediately after the appearance of the ghost. It is linked, through the discussion of the characters, to both the preceeding event (the ghost) and the succeeding questions about disturbances in the universe. The description is necessary, in a sense, as preparation for later events in the play, but it is extended beyond the needs of mere exposition. The activity thus described is questioned, wondered about, and seen as

a kind of abnormality.

Horatio's comments on the impending struggle are also rather unusual. He describes young Fortinbras as a man "Of unimproved mettle hot and full" (I, i, 96) and speaks of "some enterprize/That hath a stomach in't" (I, i, 99-100). Fortinbras has "Shark'd up a list of landless resolutes" (I, i, 98) to feed his project. Again, as in the proceeding passage, there is a sense of uncertainty, haste, heat, and unwilling participants in a process which cannot be stopped. The "mettle" of Fortinbras sounds very much like metal, especially when combined with "unimproved" and "hot and full" and placed in a parallel passage to the "daily cast of brazen cannon" (I, i, 23). The mettle--metal equation was, in fact, used as, for instance, in Marsten's Eastward Ho where a man's mettle was indicated by his metal. More important, however, is the emphasis that in Norway, as in Denmark, a potentially explosive combination of ingredients has been brought together and is beginning to ferment. Horatio suggests that the universe also reflects this condition:

> As stars with trains of fire and dews of blood
> Disasters in the sun, and the moist star
> Upon whose influence Neptune's empire stands
> Was sick almost to doomsday with eclipse
> And even the like precurse of fierce events,
> As harbingers preceding still the fates
> And prologue to the omen coming on
> Have heaven and earth together demonstrated
> Unto our climatures and countrymen (I, i, 117-125).

He describes the condition specifically in terms of fire and water,

Sun and Moon, familiar alchemical terminology. He implies that the normal rhythms, the usual relationships between the elements of the universe, are breaking down or interacting in a strange way. Once again, there is a sense of inevitability, of a process begun which must seek its own end.

There is a sense of mysteriousness, wonder, and man's inability to rationally comprehend the processes which yet affect and involve him. This viewpoint is reinforced by still another appearance of the ghost and the succeeding discussion about the Nativity. Again, all elements of the universe are joined: "whether in sea or fire, in earth or air/The extravagant and erring spirit hies/To his confine" (I, i, 153-155). Marcellus' comments on the night of the Nativity bring together a very strange combination of subject matter to the twentieth century mind; Christianity is linked in its effects to astrology, "no planets strike" (I, i, 162); folklore, "no fairy takes", and black magic, "nor witch hath power to charm" (I, i, 163). Yet even the scholar and sceptic, Horatio, replies, "So have I heard and do in part believe it" (I, i, 165).

In the first scene, the particular world of this play is presented. It is a world firmly based on the macrocosm-microcosm analogy. It is a world in which all ingredients interact--inevitably. It is mysterious and not comprehensible by logic alone. In this world, a process has been initiated; its end result is not clear, but that it will proceed seems certain. There is heat, imbalance, unusual activity, and potential eruption. This world is very like the world of the alchemists, a world in process, in chemical interaction. At the center stands Hamlet; the scene closes as the men

go to find him. He, above all others, will have to contend with this world, with both its uncertainty and its inevitability. The tension between these two factors will determine much of the progress of the play.

HAMLET'S MELANCHOLY

In the next scene, Hamlet makes his first appearance. He is dressed in black. Both his appearance and his demeanor disturb those in the scene around him. His mother advises: "Do not for ever with thy veiled lids/Seek for thy father in the dust" (I, ii, 70-1). Claudius accuses him of "impious stubbornness", "a heart unfortified", "a mind impatient" (I, ii, 94, 96). Hamlet declares that he does not merely perform the rituals of grief, "But I have that within which passeth show" (I, ii, 85). The initial characterization reveals a man who would look beneath the surface of reality, a man determined to penetrate "the veil of semblence even to the core of things", as W. H. Clemen comments.[1] He is a seeker of some stubbornness and persistance. At the same time, he is subject to depression, impatience, and frustration. In the classification of humours, Hamlet is predominantly melancholic. Maurice Hussey, exploring a visual approach to the world of Shakespeare, identifies Hamlet as "a male counterpart of Dürer's embodiment"[2] of melancholia. Hamlet, like the thinking, brooding woman of Melancholia I,

[1]Clemen, "The Imagery of Hamlet," Modern Essays in Criticism, ed. Leonard F. Dean (New York: Oxford University Press, 1961) p. 224.

[2]Hussey, The World of Shakespeare and His Contemporaries (New York: Viking Press, 1972), p. 90.

is obviously depressed and frustrated. Though seemingly of great intellectual and spiritual capacity, he is unable, at this stage, to bring his task to fruition.

What Hussey does not indicate when he makes the connection between Hamlet and Melancholia is that Dürer's picture is literally crammed with alchemical symbolism. A visual equation is made between the melancholic temperament and the role of the alchemist. The central figure, apparently lost in melancholic contemplation, is surrounded, not only by the actual, physical tools of the alchemist, but also by symbolic representations of the philosophic concepts of alchemy.[1] This kind of equation is not unique to Dürer's conception. In fact, the alchemists are often presented, both visually and verbally, as men possessing characteristics very similar to Hamlet's. They are seeking, brooding men of pale complexion, set apart from the world around them, working in dark and mysterious surroundings to penetrate "the core of things", dressed in black, and subject to depression and frustration. When Clemen describes Hamlet as "a visionary, a seer, for whom the living things of the world about him embody and symbolize thought",[2] he might as well be describing the esoteric alchemist who sees the external world as a material representation analogous to the inner processes of his own mind.

There is, therefore, in Hamlet's initial characterization a definite suggestiveness in terms of alchemy. That would mean

[1]John Read, The Alchemist in Life, Literature and Art (London: Thomas Nelson and Sons, 1947), pp. 57-62.

[2]Clemen, p. 223.

little, however, if it were not further supported by Hamlet's own words and actions. Such development occurs in Hamlet's first soliloquy and continues throughout the play. Hamlet cries out,

> Oh, that this too, too solid flesh would melt,
> Thaw, and resolve itself into a dew! (I, 11, 129-30).

The terminology is unusual and the meaning of these two lines has been much debated. What exactly does Hamlet mean by his use of solid, melt, thaw, resolve, dew? The second quarto changes the solid to sallied or soiled, and, on the basis of this change, many have interpreted the lines as Hamlet's expression of his own worthlessness, his painful recognition of a sinful or soiled nature. In this vein, the lines seem to have religious implications. M. P. Faber compares them to some lines from St. Paul which speak of "a desire to be dissolved and to be with Christ" and goes on to conclude that "the Prince's desire to be rid of the rank, inweeded garden springs not from an eagerness to join his Master in heaven, but an eagerness simply to put off his vulnerable flesh."[1] If, however, the lines are intended to suggest religious motivation, the use of "melt" and "thaw" is odd. In addition, this is Hamlet's first soliloquy, and there has been no previous indication that he is particularly sinful or particularly "vulnerable" to fleshly weakness. All one knows at this point is that Hamlet is depressed and unwilling to participate in the "show" of ceremony around him.

A second very common interpretation is to see these lines as

[1] M. P. Faber, "Hamlet's Canon Revisited," Shakespeare Quarterly, 21 (1970), p. 528.

basically equivalent to the next two:

Or that the Everlasting had not fixed

His canon 'gainst self-slaughter (I, ii, 131-2).

In other words, Hamlet wishes to die, to kill himself. The melting, thawing, and resolving is taken as a metaphorical wish for non-being. This interpretation correlates more easily with what has already been implied about Hamlet's emotional state. However, the conjunction which begins the second set of lines is _or_, not _and_, which makes the two statements contrasting alternatives rather than joined equivalents. Hamlet says, in effect, I wish _either_ this would happen _or_, if not, then self-slaughter. Perhaps the first alternative is simply a different kind of death, a natural process through which his body returns to its elemental state. Or perhaps the alternatives suggest a contrast between life and death. The first choice would be new life, a new beginning (although certainly in altered form), while the second choice would mean physical and spiritual death. One finds this kind of choice a rather characteristic concern of Hamlet as the play proceeds. In fact, it accounts for much of his indecision and delay. It seems unlikely, if to die is his sole motivation, that he would spend so much time thinking about what form his death should take. More probable is that, from the very beginning, Hamlet expresses a longing for change--for an alteration, a purification, a simplification of his whole being, and, by analogy, the world he lives in. His desire for life--_better life_ --is at least as strong as his desire for death. The use of the word _resolve_ in this initial soliloquy tends to confirm that conclusion. In the _Oxford English Dictionary_, _resolve_ is defined as

synonymous with dissolve and clarified further as meaning "To pass by dissolution, separation or change into another form or into simpler forms." To resolve is not to disappear, but to change. The word implies both death and new beginning. It also suggests a process.

There is, of course, one way of looking at the imagery of these first two lines which clears up all the difficulties. There is one frame of reference in which the process of purification and new beginnings, the idea of self-destruction and dissolution, and the unusual terminology in which these ideas are expressed can all be accommodated. That framework is provided by alchemy. For Shakespeare's audience "melt/thaw and resolve itself into a dew" would have some immediate associations with the alchemical process. It is clearly the first step in a process of change. It is the return, through the agents of fire and water, to the prima materia. In the world concieved by the alchemists, the first step in any "rejuvenation" is "to reduce the hard and dry compaction to become intenuate."[1] As Arnold of Villanova wrote, "The philosophical work is to dissolve and melt the stone into its mercury, so that it is reduced and brought back to its prima materia, i.e., original condition, purest form."[2]

Interestingly enough, after this beginning, the rest of the soliloquy develops through a series of comparisons which point out

[1]George Ripley, "Compound of Alchemy," Theatrum Chemicum Britannicum, p. 134.

[2]Cited by Herbert Silberer, Hidden Symbolism of Alchemy and the Occult Arts, trans. Smith Ely Delliffe (1917; rpt. New York: Columbia University Press, 1941), p. 123.

the contrast between the "original condition, purest form" and the current state of affairs in Denmark. Hamlet begins by commenting on the lack of vitality and value in his world, "How weary, stale, flat, and unprofitable/Seems to me all the uses of this world!" (I, ii, 133-34). There is an implied comparison between the current "unweeded garden,/That grows to seed; things rank and gross in nature/Possess it merely" (I, ii, 135-37) and the "original" Garden of Eden, with its harmonious growth. The alchemists, one remembers, saw the Garden of Eden as the representation of Nature's original natural progress toward perfection. That progress was "distorted" or "hidden" by man's expulsion from the Garden. Hamlet next compares his father to Claudius, the present king, "Hyperion to a satyr" (I, ii, 140). While his father had god-like qualities ("so loving to my mother/That he might not beteem the winds of heaven/Visit her face too roughly" I, ii, 140-42), Claudius is not even fully human. His form is half animal, half man. Quite a reduction in the scale of being to go from a godly king to a half-animal ruler! He continues his series of comparisons by contrasting his mother's sorrow (or lack of it) to a paridigm, the tears of Niobe. Again, mankind, (or in this case womankind, specifically) has descended from a god-like standard to an affinity with the beasts: "a beast, that wants discourse of reason,/Would have mourn'd longer" (I, ii, 150-1). He sees even himself in the light of negative comparisons. Claudius is "no more like my father/Than I to Hercules" (I, ii, 52-53). Hercules, one notes, is the ultimate example of heroic man, and he is also the mythological figure most widely used by the alchemists to represent the alchemical

process. Hercules attains the golden apples of the Hesperides (the philosopher's stone). While Hamlet knows, in his present condition, that he does not have the power of a Hercules, there is the suggestion that he wishes he had such strength, just as he wishes the "unweeded garden" was instead the Garden of Eden, the present king was instead his noble father, and the inadequate sorrow of his mother was instead the genuine article. If ever a world needed rejuvenation and purification, it is the world which Hamlet sees around him at the beginning of this play! He pictures it in imagery that can easily be associated with alchemy, and he emphasizes process--melt, thaw, resolve, decay, growth, increase, speed, flushing, the labours of Hercules. It is a world which needs transformation--a universal alchemy. Even though Hamlet cannot see himself now as a Hercules, his world is already changing; it is in process.

Certainly at this point, however, the process is the "black stage of the work--the dissolution, the separation, the putrefaction: "Something is rotten in the state of Denmark" (I, iv, 90). An acute sense of rottenness and decay is a necessary preliminary to the possibility of transformation. The alchemists used the phrase, "corruptis unus est generatio alterius (the breaking up of one is the begetting of another."

One would not have to be an alchemical fanatic to pick up these associations, for, as previously discussed, the alchemical view of the world was not so far removed from the general mileu of thought in that time period. The alchemical process included suggestions of mystical death and new birth in a religious sense, of loss of innocence and trial in the sense of initiation, and of

psychological struggle. Hamlet's first soliloquy contains suggestions of each of those processes, and, in fact, the passage has been discussed and interpreted from each of these angles. The advantage in looking at the passage in terms of alchemical imagery is that alchemy provides a framework which unifies all of these impulses. It also provides a particular kind of language which is vivid and dramatic. Alchemy is a metaphor for the process of change and development; it was, in Shakespeare's time, a very familiar metaphor. In other words, Shakespeare, without advocating alchemy as philosophy or even adhering very strictly to its technicalities, can use its strong imagery to awaken multiple associations. "Oh, that this too, too solid flesh would melt,/Thaw, and resolve itself into a dew!" The lines are memorable and dramatically effective in expressing a depth of emotion and a wealth of association. They suggest that a process of transformation has begun.

The sense of chemical action and reaction continues in the next scenes of the play. The process of the play is the alchemical process; bursts of violent interaction are interspersed with tense periods of waiting in which "materials" are reconstituted, fixed, and multiplied. The dissolution moves toward putrefaction, then, with agonizing slowness, struggles toward separation and purification. Illogically, miraculously, the process carries its substances to fixation and final transmutation. This kind of imagery, not confined to any one character or one idea, carries with it suggestions of both mysteriousness and inevitability. As in the first scene, it is part of the forward movement of the play. The

"chemical" imagery is used like foreshadowing, in the sense that it creates a feeling of process which will inevitably proceed to its end. Hamlet, for instance, says, "Foul deeds will rise,/Though all the earth overwhelm them, to men's eyes" (I, ii, 257-8). Like the vapours which rise from the black, bubbling mixture of the alchemical process, Claudius' actions will ultimately be exposed. Laertes warns Ophelia (the warning might be just as appropriate to Hamlet or even himself): "And in the morn and liquid dew of youth/Contagious blastments are most imminent" (I, iii, 41-2). All of the "youth" of the play will be subjected to the "blastments" of the world around them; they are all involved in the same chemical process. Here, as earlier, Hamlet is the focus of the process (the potential tincture), "for on his choice depends/The [sanity] and health of the whole state" (I, iii, 20-1). But all are involved and with very little actual choice in the matter: "his will is not his own" (I, iii, 17). Polonius, also, speaks of a chemical interaction which is both mysterious and forboding: "These blazes, daughter,/Giving more light than heat, extinct in both/Even in their promise as it is a-making, You must not take for fire" (I, iii, 117-19). There are a lot of warnings in this play, <u>from</u> almost everyone <u>to</u> almost everyone. There is a continual sense of uneasiness, of being caught up in a movement which is not entirely clear. There are foul vapours and contagious blastments and strange fires. There is alchemy.

TAINT AND TINCTURE

Hamlet continues to express himself in alchemical metaphor.

In Scene 4 of Act I, he is not so much despairing as analytical. He considers the nature of corruption. Like the alchemists, he assumes that basically good material (all metals would be gold) may be ruined or tainted by impurities, thus preventing the full realization of potential.

> So, oft it chances in particular men,
> That for some vicious mole of nature in them,
> As, in their birth--wherein they are not guilty
> Since nature cannot choose his origin--
> By their o'er growth of some complexion
> Oft breaking down the poles and forts of reason,
> Or by some habit that too much o'er-leavening
> The form of plausive manners, that these men,
> Carrying, I say, the stamp of one defect,
> Being nature's livery, or fortune's star--
> His virtues else--be they as pure as grace,
> As infinite as man may undergo--
> Shall in the general censure takes corruption
> From that particular fault. The dram of evil
> Doth all the noble substance often dout
> To his own scandel (I, iv, 31-38).

Man is seen as a substance, compounded of various elements and subject to the interaction of those ingredients within him. Even a dram (1/8 ounce) of evil may change the nature of this material. It may dout (the O.E.D. defines this term "extinguish as a light") the shining noble substance (suggesting gold, especially when combined with dout). This is the alchemical idea of tainting. An

inferior ingredient may "corrupt" the entire mixture. The alchemist conceives of his role, therefore, as one of separating the impurities, the defective materials, from the prima materia which is essentially good: "For there is only one stone, one medicine, to which nothing foreign is added and nothing taken away except that one separates the superfluities from it."[1] In order to accomplish this purification, of course, a process is required. Paracelsus explains, "Accordingly, you should understand that alchemy is nothing but the art which makes the impure into the pure through fire."[2] The material must be subjected to "fire" which will separate the true from the false.

It is important to note here that Hamlet is not completely pessimistic. He does not conclude that virtue is non-existant, only that it is almost inevitably incomplete and tainted by defect. He even views this as "natural": "wherein they are not guilty/Since nature cannot choose his origin" (I, iv, 25-26). Thereby he implicitly accepts a world which is not perfect. It is in the "general censure" that all appears to be corrupted; virtue is hidden by relatively small faults (a dram). Just as the distinction of his nation is soiled with "swinish phrase" (I, iv, 19) and their achievements "though perform'd at height" (I, iv, 21) are not fully valued because of their reputation as drunkards, so does Hamlet see man as constantly failing to achieve his potential due to the "o'er growth" or "o'er leavening" of one imperfection.

[1]Herbert Silberer, p. 122.

[2]Theophratus Paracelsus, Paracelsus: Selected Writings, ed. Jolande Jacobe, trans. Norbert Gusterman, 2nd ed. (1951; rpt. New York: Pantheon Books, 1958), p. 143.

Again, Hamlet seems to be trying to see beneath the surface of things.

He diagnoses the "sickness," and the next logical step would be to seek a "cure." Although Hamlet ostensibly is speaking of his country and of other men, he must also be thinking of himself. In fact, he almost always speaks of both himself and his world in the same breath, generalizing all conditions. Hamlet has certainly experienced the "o'er growth of some complexion" (I, iv, 27), and his more positive attitude toward this phenomena now suggests that he is open to a process of purgation and change. He is ready, not consciously, but implicitly to rid himself of impurities so that his virtue might be effective in terms of the world around him.

At the opposite pole of the "tainting" phenomena stands the concept of "tincturing." To the alchemists, it seemed logical to assume that, if an impurity could taint an otherwise noble substance, a perfected material could also tincture or multiply its virtues on the base materials around it. The philosopher's stone could turn lead into gold. Christ could transform fallen man with his "Blessed ruby-colored tincture, that is to say, His Blood."[1] The idea is not so strange as it may first appear, for it shares in the general tendency to analogize and to see all facets of the universe as interrelated and dependent on each other. A bad king could, for instance, corrupt his whole world or a good king could transform his. On an individual basis, the same was true. A man's

[1] Sophic Hydrolith, cited by Wayne Shumaker, The Occult Scientists in the Rennaisance: A Study in Intellectual Patterns (Berkely: University of California Press, 1972) p. 104.

entire nature might take on the characteristics of his baser instincts or, on the other hand, he might ascend to an almost god-like state of perfection. Pico della Mirandola suggested this division: "Thou canst grow downward into the lower natures which are brutes. 'Thou canst again grow upward from thy soul's reason into the higher natures which are divine."[1] The alchemists shared with the neo-platonists in this recognition of the mixed nature of man. Like the neo-platonists, also, they assumed that a certain process might aid in progress toward perfection. The process, however, was different. It involved dissolution, separation, putrefaction, congealation, and finally, multiplication and projection. It moved from the throwing off of the "tainting" impurities, through the torture and suffering of the materials, to the final multiplication of the perfected tincture. It was a struggle of "mighty opposites" so to speak--the good and the evil, the fire and the water, the active and the passive, the pure and the impure. Always there was the possibility of taint or tincture.

Obviously, Hamlet's world is tainted, and if a source can be designated for that fault, it is certainly Claudius. Hamlet, even before his father's ghost details the crimes of Claudius, finds himself in natural opposition to his uncle. If his world is to be rejuvenated, the tincture must surely come through him. Even though Hamlet often seems excessively concerned with himself throughout the play, self, state, and universe are almost synonymous for him. He progressively becomes more conscious of his role

[1] Oration on the Dignity of Man, trans., Charles Glenn Wallis 1940, rpt. (New York: Bobbs-Merrill Co., 1965), p. 5.

in restoring his world, even if that means self-sacrifice. Hamlet is the focus of a process in this play which seems mysterious and yet almost inevitable. It is a kind of alchemical process. He does not initiate it, or direct it, or even understand it; but he is part of it. Hamlet is potentially gold, but he must suffer through all the stages of the refining process before he is able to project his influence on the world around him.

That Hamlet has a more positive attitude about himself than in Scene 1 and begins to conceive of his role is demonstrated only a few lines later. As the ghost beckons to him, his friends try to dissuade him from following. Hamlet is determined and says, "My fate cries out, and makes each petty artery in this body/As hardy as the Nemean lion's nerve" (I, iv, 81-83). Hamlet submits himself to whatever lies ahead, even though personal danger is involved. He is still not Hercules, but he is at least a worthy opponent, the Nemean lion. The ghost describes his own murder, "most foul, strange, and unnatural" (I, v, 28). It is the result of an evil power--Claudius "with witchcraft of his wit, with traitorous gifts, wicked wit and gifts (I, v, 43-44), and Hamlet is firmly directed to stand against that evil. The actual method of murder is described in great detail, in chemical detail. The "leprous distillment" (I, v, 64) (leper is common alchemical terminology for base, imperfect matter) spreads as "swift as quicksilver" (I, v, 66) and infects the entire body, "most lazar-like." The same poison which was poured in the ear of the king has, in effect, been applied to all of Denmark: "so the whole ear of Denmark/Is by a forged process of my death/rankly abus'd" (I, v, 36-38). Like the dram of evil which douts all the noble

substance, this small vial of poison has infected the whole kingdom. The ghost ends with a warning to Hamlet. His own purpose must not be corrupted by the spreading influence of evil: "Taint not thy mind, nor let thy soul contrive/Against thy mother aught. Leave her to heaven" (I, v, 85-6). His motivations must be pure, unmixed with baser matter.

PURGATION AND PURIFICATION

Immediately after Hamlet speaks with his father's ghost, he begins the process of achieving this singularity of purpose. He must destroy a part of himself (the superfluities) in order to do so:

> Yea, from the table of my memory
> I'll wipe alway all trivial fond records,
> All saws of books, all forms, all pressures past,
> That youth and observation copied there,
> And thy commandment all alone shall live
> Within the book and volume of my brain,
> Unmx'd with baser matter (I, iv, 99-104).

This is a kind of return to the prima materia, a dissolution and separation. It means a loss of sorts, a self-sacrifice. Hamlet, even at this point, senses the implications of the role he is committed to: "The time is out of joint--O cursed spite,/That ever I was born to set it right" (I, v, 189-91). He also feels a part of a mysterious, wondrous, process. He tells Horatio, "There are more things in heaven and earth, Horatio/Than are dreamt of in our philosophy" (I, v, 166-67).

Hamlet must now endure a period of testing and purgation before he can bring his task to fruition. Although this delay has been much discussed and is often viewed as a weakness in Hamlet, it is a necessity if one looks at the play in terms of a process. Whether this process is seen as a religious purification, as psychological development, or as the process of alchemy, it does not alter the fact that time must pass and Hamlet must change. He cannot jump immediately from the very young, rather sarcastic, self-righteous Prince at the beginning of the play to the matured and enobled adult who finally sacrifices his life to the restoration of his kingdom. The alchemists would say that the material must be refined, purified, and brought to a state of maturity or "ripeness" before tincture is possible. The alchemists, one recalls, imagined that their labors could take the place of Time, that they could, through their art, bring to maturity what would take ages to develop in Nature. It is interesting to note that Hamlet does age much faster in this play than the time scheme apparently allows. Spenser points out that "At the beginning Hamlet is fresh from the university; he is about twenty. In the graveyard scene he is unmistakenly described as thirty."[1] Shakespeare, of course, often manipulates specific numbers in order to reveal an underlying idea. The idea, in this case, is that Hamlet changes a great deal during the play; he matures rapidly through the suffering imposed by his role. He moves from the raw, "unrefined" substance of his youth to the "ripeness" of processed

[1]Theodore Spenser, Shakespeare and The Nature of Man, 2nd ed. (1942; rpt. New York: Macmillan Company, 1961), p. 108.

material.

Hamlet's role is of a special nature. It cannot, as the ghost warns, be a matter of personal revenge and emotional reaction. Hamlet must act, but his actions must result in tincture rather than taint. In some sense Hamlet must rise above his corrupted world and put off the ties that bind him to it. This is matter for some delay. Hamlet cannot act like Laertes or even Fortinbras. His purpose is more universal and more difficult. His actions must not, like Laertes',

> "seem the taints of liberty,
> The flash and outbreak of a fiery mind,
> A savageness in unreclaimed blood
> Of general assault" (II, i, 32-35).

Nor can he, like Fortinbras' "list of lawless resolutes" face death "for a fantasy and trick of fame" (IV, iv, 61). Hamlet must do two things before he is ready to act: he must test the truth of the ghost's information to make sure he does not act on the basis of "fantasy," and he must prepare himself for the sacrificial role of "scourge and minister."

In Acts II and III, Hamlet is subjected to a great deal of pressure, both internal and external. The alchemists repeatedly emphasize the importance of the "black" stage of their work. It involves a kind of spiritual death and descent into hell, "terrible" and "sinister" experiences. It is represented by references to imprisonment, by pictures showing the subject in a grave, by skulls, and rotting materials. Hamlet's mind is also filled with these images. When Polonius asks him to "walk out of the

air" (II, ii, 207), he replies, "Into my grave?" (II, ii, 210). He tells Rosencrantz and Guildenstern that Denmark is "a prison." In fact, that condition is generalized to include the whole world: "A goodly one, in which there are many confines, wards, and dungeons, Denmark being one of the worst" (II, ii, 251-53). He thinks of the girl he has loved in terms of a "conception" similar to "if the sun breed maggots in a dead dog" (II, ii, 181-82). His world "appears no other thing to me than a foul and pestilent congregation of vapours" (II, ii, 313-15). Certainly he is sceptical at this point about the possibilities of man. That "paragon of animals" is nothing more than a "quintessence of dust" (II, ii, 319-20). Quintessence (fifth essence) is an alchemical term indicating that point at which the material is capable of multiplying or projecting its qualities onto other materials. The only kind of multiplication Hamlet can see now is the projection of "dust"--the spreading taint of earthly, evil, base qualities. The usage is similar to Donne's "Quintessence even from nothingness" in "Nocturnal upon St. Lucy's Day." The poet has become a "grave," a carcass, "the first nothing;" "life is shrunk/Dead and interred."[1] In both cases great disillusionment is expressed about life's possibilities or, more particularly, alchemy's possibilities. The "golden fires" of life produce, not transformation, but foul vapours.

Just as alchemy has been perverted into a "quintessence of dust" rather than gold, and Hamlet's world seems full of decay and

[1]John Donne, The Selected Poetry of Donne, ed., Marius Bewley (New York: New American Library, 1966).

death rather than life and growth, so also has the theater suffered a strange alteration. Child actors have taken over and carry "Hercules and his load too" (II, ii, 379). In his present mood Hamlet says, "It is not strange; for mine uncle is King of Denmark" (II, ii, 380). The whole world is turned upside down. This reference to Hercules is, of course, based on the sign of the Globe Theater, but it also recalls the earlier references in which Hamlet attempts to identify himself with Hercules. It is a further expression of his sense of powerlessness in the face of a seemingly unnatural force which Hamlet associates both with his uncle and the children. He concludes, "There is something in this more than natural, if philosophy could find it out" (II, ii, 385). Throughout this section, Hamlet speaks in prose, another indication of the depths to which he has sunk. He thinks of himself as "a dull and muddy-mettled rascal" (II, ii, 594) very far from being able to actively affect his world, very far from the "noble substance" which might bring light to the darkness of Denmark.

While Hamlet constantly degrades himself, there is a sense within the play that he is being forced, both inwardly and outwardly, toward some kind of resolution. His next solioquy demonstrates that the event is never far from his mind, and he both fears and welcomes it. As in his first soliloquy, he broods upon an either—or question, involving life and death.

> To be, or not to be: that is the question.
> Whether 'tis nobler in the mind to suffer
> The slings and arrows of outrageous fortune,
> Or to take arms against a sea of troubles

And by opposing end them. To die; to sleep;
No more; and by a sleep to say we end
The heart-ache and the thousand natural shocks
That flesh is heir to. 'Tis a consummation
Devoutly to be wish'd (III, i, 56-61).

There has been considerable controversy about the use of the word consummation in this passage. As Hunter Kellenberger points out, the word used in the Second Quarto, 1604, was consumation, but the spelling in the First Folio, 1623, was consummation.[1] The two different spellings express what seem to be contradictory meanings; that is, consumation is derived from consumere and means destruction or wasting away while consummation is derived from consummatio which means to complete or fulfill. Kellenberger examines the various critical positions in that controversy and concludes: "the total evidence lends strong support to the view that in Shakespeare's mind the primary meaning of 'consumation-consummation' was one of consuming and destruction. Even the Hamlet soliloquy is to be read in that light, though here the existence of the homonym 'consummation' with its meaning of fulfillment creates an ironic ambiguity intensifying the note of tragic despair."[2] What Kellenberger does not perceive is that the use of this word, with either spelling, is neither ambiguous nor contradictory when considered as alchemical imagery. For in

[1]Hunter Kellenberger, "Consummation or Consumation in Shakespeare," Modern Philology, 65 (1967), 235.

[2]Ibid.

alchemy, being "consumed" or "destroyed" was the first and most basic step in arriving at "completion" or "fulfillment." The process was at one and the same time both a "consumation" and a "consummation." In alchemy, as in religion, one had to lose his life in order to gain it. That Shakespeare intended some suggestion of fulfillment is evidenced by his use of the adverb "devoutly" immediately following "consummation." At the same time, it is evident that Hamlet clearly realizes that his consummation will also be his destruction, the death of his self, at least as he now knows it. He struggles, therefore, not with a desire for death, but with the difficulty of accepting a role which may mean self-sacrifice. The action which he contemplates ("to take arms against a sea of troubles") is not suicide, but the completion of his task. In spite of earlier references to death and his grave, Hamlet clings to life. He hesitates before submitting himself to "The undiscovered country from whose bourn/No traveller returns" (III, i, 79-80). Hamlet is still not absolutely certain of the rightness of the action which he contemplates: "Thus conscience does make cowards of us all" (III, i, 83). He must know that and must also feel his own strength before he can proceed. At this point he is, as he tells Ophelia, "crawling between heaven and earth" (III, i, 129-30), unable to choose either alternative.

Yet Hamlet continues to relinquish the ties which bind him to earth. He firmly, even cruelly, dismisses one of his major passions, the lovely Ophelia. In doing so he expresses his estimation of himself which, although it seems "out of tune" and untrue

to both Ophelia and the audience, accurately reflects the kind of struggle he is experiencing. Hamlet tells Ophelia, "I am very proud, revengeful, ambitious, with more offences at my beck than I have thought to put them in, imagination to give them shape, or time to act them in" (III, i, 126-29). One would have thought almost the opposite: that Hamlet was not very proud of himself, that he was not particularly motivated by ambition, and that, if he had offences, they were ones of omission rather than commission. Perhaps it is only his "antic disposition" speaking, but Hamlet does not really lie through his madness, he only veils the truth. In fact, Hamlet probably still doubts his own motives. Again, there is the suggestion that he finds it necessary to purify himself before proceeding. This is a very common attitude among the alchemists. Basil Valentinus, for instance, in his Triumphal Chariot of Antimony, had instructed his readers that they must approach the work with "a conscience . . . free from all ambition, hypocrisy, and vice, as also from all cognate faults such as arrogance, boldness, pride, luxury, worldly vanity."[1]

When Hamlet visits his mother in her chambers, he stresses the necessity of self-examination. He tells her that he will, "set you up a glass/Where you may see the inmost part of you" (III, iv, 19-20). He will probe her essence, her heart,

[1]Basil Valentinus, The Triumphal Chariot of Antimony (London: Vincent Stuart, [Being the Latin version published at Amsterdam in the year 1685, translated into English, with a biographical preface, 1894] 1962), p. 13.

If it be made of penetrable stuff,

If dammed custom have not braz'd it so

That it is proof and bulwark against sense" (III, iv, 36-38).

Again, there is a reiteration of the separation and purification idea: "throw away the worser part of it,/And live the purer with the other half" (III, iv, 161-62). She must purge the "black and grained spots" within her soul. Like the dram of evil, they will spread and taint her whole being if they are not removed: "Rank corruption, mining all within,/Infects unseen" (III, iv, 148-49). Hamlet offers some advice to his mother which is, perhaps, a part of his own solution:

Assume a virtue, if you have it not.

. . . . . .

For use almost can change the stamp of nature,

And either master the devil or throw him out,

With wondrous potency (III, iv, 160, 168-70).

Hamlet, in a sense, has submitted himself through "use" to the forces within and without which will purify his purpose and bring him to a perfected state. Both in the kind of advice he gives and in his specific statements, Hamlet demonstrates a much stronger assurance about the role he is to play:

I do repent; but Heaven hath pleas'd it so,

To punish me with this and this with me,

That I must be their scourge and minister.

. . . . . .

I must be cruel, only to be kind (III, iv, 173-75, 78).

It is significant that Hamlet uses both scourge and minister

to describe his role. Like consumation-consummation, the combination implies both destruction and fulfillment for Hamlet. As Bowers points out, "Any man who knew himself to be such a scourge knew both his function and his fate: his powers were not his own. . . . Any human agent used by God to visit wrath and to scourge evil by evil was already condemned."[1] As a scourge, Hamlet's own doom is inevitable; he will be sacrificed. But as a minister, his fulfillment is also implied. Again, one should remember that in the alchemical process the materials must "suffer" and "die"; this is the necessary scourging of evil. It is the erasure of the inevitable taint in a fallen world. The end result, however, is perfection and potential projection, a kind of"ministering" effect on baser matter. Always, alchemy expresses an interaction and eventual unification of opposites. This same combination of seeming contradictions is evident in the play. Hamlet moves toward both a consumation and a consummation. He is both a scourge and minister.

Gertrude, after the meeting with her son, somehow perceives a change in his "madness," a change which (although Gertrude does not understand it as such) signifies that Hamlet is nearing a point of transformation. She expresses the change that she sees in terms suggestive of alchemy:

> O'er whom his very madness, like some ore
> Among a mineral of metals base,
> Shows itself pure (IV, i, 25-27).

[1]Fredson Bowers, "Hamlet as Minister and Scourge," PMLA, 64 (1949), 743.

Claudius also recognizes Hamlet's growing power. He realizes that he cannot get rid of Hamlet openly, even though Hamlet has committed murder, because of the effect on the "multitude." Curiously enough, Claudius also speaks of Hamlet as a scourge: "Th' offender's scourge is weigh'd/But never the offence" (IV, iii, 6-7). Claudius makes a statement which he means to apply to his own actions, but which actually predicts Hamlet's function: "Diseases desparate grown/By desperate appliance are reliev'd,/Or not at all" (IV, iii, 9-11). Hamlet will cure the disease of this kingdom, like a pure ore among "metals base." It will require his life, "a desperate appliance, or not at all."

Claudius again mentions Hamlet's power with the public when he speaks to Laertes. Even Hamlet's faults are transformed to virtue by their love. One is again reminded of the process in this play, alchemical both in its nature and in the imagery in which it is stated:

> Who, dipping all his faults in their affection,
> Would, like the spring that turneth wood to stone,
> Convert his gyves to graces (IV, vii, 19-21).

Hamlet, however, is not as conscious of his growing power as are his mother and his uncle. Before he leaves for England, his mind is still much occupied with thoughts of death and his own inadequacy. "Your worm is your only emperor for diet. We fat all creatures else to fat us, and we fat ourselves for maggots. . . . a king may go a progress through the guts of a beggar" (IV, iii, 22-24, 32-33). The lines are spoken lightly, in the antic disposition, but still they present ugly, horrifying images. The "black-

ness" of the work is not yet over. Hamlet also compares himself unfavorably with Fortinbras, although here there is a definite recognition that his own purpose is in a different dimension from that of Fortinbras. It involves more than ambition and "honour." Fortinbras' example is "gross as earth" (IV, iv, 46) compared to his own, but still he admires the strength with which it is carried out. That strength is described in terms which, once more, can be associated with alchemy:

> Whose spirit with divine ambition puff'd
> Makes mouths at the invisible event,
> Exposing what is mortal and unsure
> To all that fortune, death, and danger dare
> Even for an egg-shell (IV, ii, 49-53).

Use of the words divine, puff'd, invisible event, exposing, and egg-shell are interesting. One is reminded of the "puffers" tending the alchemical fire; the priestly function of the alchemist who aids in the "divine" plan of perfection; the mysterious, hidden nature of the "invisible event"; the exposing and dissolving of all that is "mortal and unsure"; and finally the philosophic egg. (The use of egg-shell suggests, as does the rest of the passage, that Fortinbras' purpose is rather futile or at least incomplete as compared to Hamlet's.) The passage perhaps describes most accurately the process through which Hamlet wishes his own spirit might develop.

There is one more implied comparison between Hamlet and another character in the play, again emphasizing the more universal, more sanctified, nature of Hamlet's task, and thus the greater

difficulty in carrying it out. When Laertes is confronted with his own father's death, his reactions are immediate:

> To hell, allegiance! Vows to the blackest dead!
> Conscience and grace, to the profoundest pit!
> I dare dammation. To this point I stand
> That both the worlds I give to negligence (IV, v, 130-34).

Hamlet is meant to be the restorer of this diseased kingdom. He cannot react as Laertes and accomplish that purpose. The poisonous taint of murder will only spread if he gives both the worlds "to negligence." Hamlet must rejuvenate both the microcosm and the macrocosm. Hiram Haydn comments on the essential contrast presented in the play between the "actions" of Fortinbras and Laertes and the apparent "inaction" of Hamlet. Although he does not relate his comments specifically to alchemy, he speaks of the "process bubbling in Hamlet's mind."[1] His description of the contrast is easily related to the process of alchemical unification and transformation: "On the level of external action, he [Hamlet] is seeking honorable, just revenge; on the level of philosophical orientation, he is searching for integration--a condition in which word and action may become one, with a mind at peace. And because, until he attains this condition, just and honorable revenge is impossible, the resolution of the action must await the philosophical solution."[2] Hamlet must seek his own transformation before he can tincture his world.

[1] Hiram Haydn, The Counter-Renaissance (Gloucester, Massachusetts: Peter Smith, 1960), p. 621.

[2] Ibid.

TIME AND THE ALCHEMICAL PROCESS

When Hamlet returns to Denmark in Act V, he is noticeably changed. This is apparent even in the graveyard scene in the famous and unique contemplation of skulls. There is no longer any hysteria, fear, anger, impatience, or "madness" in his comments. He accepts all with a sad, but not desparate, wonder. His personality has undergone a kind of alchemical process: a Dissolution (disintegration, visible in the manic-depressive madness) a Purgation (submission to the fire and cleansing of impurities), a Putrefaction (intense recognition of his own and his world's "rotteness"), and finally a Fixation (reunification of personality and purpose). Hamlet is now ready to act, and one senses the new maturity and stability. It is at this time that Hamlet can say, for the first time in the play, "This is I, Hamlet, the Dane!" (V, i, 280-81). He is assured and confident about his own identity as well as his potential power:

> Sir, though I am not splenitive and rash,
> Yet I have something in me dangerous,
> Which let thy wiseness fear (V, i, 284-86).

Once again, Hamlet mentions Hercules, but this time not in the light of negative comparison with himself. Hercules is no longer beyond him, but rather, along with him, subject to universal forces that move toward their own ends:

> Let Hercules do what he may
> The cat will mew and dog will have his day (V, i, 314-15).

Hercules' actions (or Hamlet's or any man's) will come to fruition only at the proper time, which man himself cannot really choose.

All are a part of a process, a universal order, and can but submit themselves to the "use" of that process. One recalls the lines from Morienus which evidence this same kind of thinking: "Almighty God in his power created powerless servants who can neither undo what he has done nor advance what he holds back nor can they ever know anything except what he reveals to them or accomplish anything except what he grants to them."[1]

The idea is repeatedly emphasized in Act V. It is the very center of Hamlet's thinking now. He tells Horatio,

> There's a divinity that shapes our ends,
> Rough-hew them how we will (V, ii, 10-11).

It gives Hamlet an assurance, an enobled maturity, which is amazing to those around him. When Hamlet reveals to Horatio the king's plot against himself, Horatio, the most well-balanced, calm, reasonable character in the play, is worried; he questions and urges some haste. Hamlet no longer berates himself for delay; he is no longer impatient. He tells Horatio,

> the interim is mine,
> And a man's life's no more than to
> say 'One! (V, ii, 73, 74).

The particular phrasing is interesting, for no other body of imagery contains such absolute emphasis on One as alchemy. It is the repeated and consistent watchword of their art. Paracelsus

[1]Morienus, A Testament of Alchemy, trans. Lee Stavenhagen (Hanover, New Hampshire: University Press of New England, 1972), p. 11.

expressed this devotion to One as clearly as anyone:

> There is one single number that should determine our life on earth, and this number One. Let us not count further. It is true that the godhead is Three, but the Three is again comprised in the One. And because God transforms Himself into the One, we men on earth must also strive for the One, devote ourselves to the One and live in it. In this number is rest and peace, and in no other. What goes beyond it is unrest and conflict, struggle of one against another. For if a calculator sets down a number and counts further than one who can say at what number he will stop? But this question is the difficulty that gnaws at us and worries us. How much more pleasant and better it would be if we always walked in the path of the One.[1]

Hamlet now walks in the path of the One, and what an amazing transformation this is for him! He who has calculated, considered all the alternatives, contemplated actions and reactions, lost himself in division, can now say, "a man's life's no more than to say 'One!'" Perhaps the whole mystery of the play is contained in that line, for the question has always been: How does Hamlet move from the boy of Scene 1 to the man of Act V? He moves through a process of transformation, a process very much like alchemy.

Horatio can scarcely believe this new Hamlet. Now he urges Hamlet to wait, to delay: "If your mind dislike anything, obey it. I will forestall their repair hither, and say you are not fit" (V, ii, 228-9). But once again Hamlet reveals his acceptance of the process he is involved in and his assurance that it will reach completion:

> If it be now, 'tis not to come; if it be not
> to come, it will be now; if it be not now, yet
> it will come; the readiness is all (V, ii, 231-34).

One is again surprised at Hamlet's complete acceptance that <u>time</u>,

through its own force and movement, will resolve all. Time has changed from an adversary to an ally. At the beginning of the play, the "sweaty haste," the pressure of time, was emphasized. Throughout the middle acts, the time that passed was an accusation of Hamlet's delay; it was a thorn, an enemy, a matter of impatience and disappointment. Now it is a friendly force which leads, inevitably, toward resolution. There is, however, a qualification which suggests why Hamlet views time differently; he says, "the readiness is all." Hamlet has reached a different stage of awareness. In alchemical terminology, it is the stage of the Great Work when the materials have been brought to such a state of readiness that the rest is "child's play." This ludus puerorum motive is often represented in alchemical art by children or women or cupids taking over the work in the laboratory. The most famous representation of this idea is Tenier's Alchemical Cupids.[1] Basically the concept suggests that, at a certain point, after all the materials have been brought to their "quintessence," the process will proceed on its own--"if it be not now, yet it will come; the readiness is all." The alchemist's struggle with time, his commitment to replace it with his own labours, has been resolved, and time now becomes an ally in working toward completion.

There is one further indication of Hamlet's self-awareness when he says to Laertes, "in mine ignorance/Your skill shall,

[1]John Read, The Alchemist in Life, Literature and Art, discusses the ludus puerorum motive and several art works, including Alchemical Cupids, which visualize that alchemical idea.

like a star in the darkest night,/Stick fiery off indeed" (V, ii, 265-67). Laertes thinks he is mocking, but it is in fact the confrontation with Laertes which will release "like a star in the darkest night" Hamlet's own power, a power which will indeed provide light in a kingdom that has grown dark under Claudius. It is a power which Hamlet recognizes "in mine own ignorance" as working through him, but also beyond him.

In this regard, Hamlet's insistence that Horatio live to tell his story is important. Though Hamlet must sacrifice himself, his influence will spread and affect his world. Horatio promises that he will "speak to th' yet unknowing world/How these things came about" (V, ii,390-91). Hamlet has scourged the evil, the taint of poison, from his world, and his story will tincture the world to come. There is a sense of divine significance in this act: "and flights of angels sing thee to thy rest" (V, ii, 371).

The interpretation of Hamlet's progress through reference to alchemical imagery and ideas does not essentially change previous assumptions about his character. It does, however, clarify the kind of struggle he endures and the necessity of his delay. Further, it illuminates the rather unusual imagery through which Hamlet speaks, by seeing it in relationship to a world view that assumed a continuous, dramatic process of transformation. Hamlet's inner and outer struggle is toward integration and restoration. Whether one sees this as psychological development, religious ascent, or simply the process of maturation, it nevertheless involves turmoil, acceptance, and new identity. The alchemical idea of a process through which man may perfect himself includes

all these forms of development as well as the insistence that man reflects and is reflected by the order or disorder of the world around him. In other words, Shakespeare is able to utilize alchemical imagery and ideas, not to advocate a particular belief, but to reflect a basic question about man's nature and the kinds of conflicts he faces in seeking his own completion.

Perhaps the most outstanding characteristic of Renaissance man was his intense recognition of man's potential good and potential evil. Alchemy, through both the nature of its esoteric assumptions and the very frequent misuse of its exoteric methods, was a remarkable tool for expressing the duality of this optimistic-pessimistic mood. In its very existence it demonstrated both the powers and the perversions of man. In addition, its language offered rich poetic possibilities, and its philosophy incorporated many of the myths, the symbols, and the images associated with the eternal mysteries. The struggle of mighty opposites, seen through the imagery of alchemy, is man's eternal struggle, but it is also especially the dilemma of Renaissance man. As Roy Battenhouse states: "In an age when thinking was emerging from the dominance of Christian dogma to become once again, as in classical times, man centered--when Pico was raising new hopes by his Oration on the Dignity of Man, and Calvin new anguish by his outcry over man's lost dignity--Shakespeare brought the mood of the time to focus in Hamlet."[1] Surely that mood is reflected through the process of

[1]Roy Battenhouse, "Hamlet's Apostrophe on Man: Clue to the Tragedy," PMLA, 66 (1951), 1073.

alchemy, a metaphor which effectively contains both the anguish of Calvin and the hope of Pico.

CONCLUSION

Alchemy was much broader, much more eclectic, and much more influential than many have previously conceived of it. It incorporated, in a world view which attempted to unify all aspects of the natural and spiritual universe, many of the traditions of myth and religion and medicine, as well as the principles of psychology, not yet labeled, but nevertheless operant. It emphasized the possibilities of transformation. The alchemists were concerned with process and change and restoration. From that viewpoint one can most clearly see the influence of alchemy on Shakespearean works: in the possibilities of taint or tincture, in the inevitable actions and reactions of process, in the terrible struggles of change, and in the renewed life of restoration. A modern poet, W. S. Merwin, indicates the all-inclusive, comprehensive nature of the alchemical vision: "All the gold that exists was transmuted once by men learning to change themselves."[1]

When one returns to read the texts of the alchemists, one finds a world shot through with wonder and mystery and possibility, a world alive in all its aspects, from the growing metals hidden in earth's bosom to the revolving planets of the heavens. It is a world always in process, always moving and changing. Paracelsus wrote, "God created the resin of the earth and endowed it with

[1]W. S. Merwin, Writings to an Unfinished Accompaniment (New York: Atheneum, 1973), p. 104.

many unspeakable qualities, not only for remedying diseases but also for alchemical operations."[1] One senses the same kind of fascination with life and movement and mystery in Shakespeare's plays. His world, like that of the alchemists', is full of potentiality. It is forever descending or ascending toward disease or health. It is a world of "unspeakable qualities" which yet speaks to the hearts and minds of all men. Shakespeare, not improbably, realized the relationship between the drama of his great stage and the drama of the alchemists' Great Work. Shakespeare addressed himself to the eternal questions of man's nature, his purposes, and his possibilities. He did so, in part, through the multiplying metaphors of alchemy.

[1]Paracelsus, Hermetic and Alchemical Writings, p. 265.

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